HANDBOOK TO THE INDIAN ART COLLECTION IN THE PRINCE OF WALES MESEUM OF WESTERN INDIA, BOMBAY

CHANDRA (M.)

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MADRAS

A HANDBOOK

TO

The Indian Art Collection

IN

The Prince of Wales Museum of Western India, Bombay

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PREFACE

The publication of this book fulfils a long felt desire of the Museum Authorities to acquaint an average visitor with all what is best in the Indian Collection of the Museum. In selecting the plates due attention has been paid to the aesthetic qualities of the objects. The descriptive side has been limited to few remarks about the history of the various objects, their places of manufacture, and patterns.

The nucleus of the Art Section was formed with the acquisition of old textiles, Indian pictures, jades, etc. purchased by the Trustees from Mr. Purshottam Vishram Mavji. The vast art collection of Sir Ratan Tata was presented to the Museum by Lady Ratan Tata in 1921. In 1928, the Government of Bombay transferred the School of Art Collection of metal ware, textiles, and musical instruments. The Museum collection was further augmented by the gift of the art collection of Sir Dorab Tata by the Trustees of the Sir Dorab Tata Trust.

In the preparation of this Handbook I have been greatly helped by the notes of my predecessor Captain Gladstone Solomon, and also by my assistants, Messrs. Edmund D'Lima, and Pandharinath Subhedar. I have also to thank Mr. G. V. Acharya, Curator, Archaeological Section, and Mr. R. G. Gyani for their valuable suggestions and advice.

MOTI CHANDRA.

TABLE OF CONTENTS

	Page
Chapter I	
Copies of Ajanta Frescoes	1
Chapter II	
Miniature Mughal Painting	6
Deccani Painting	25
The Rajput School	28
Chapter III	
Ivory-Carving in India	31
Chapter IV	
Wood-work	36
Sandalwood-Carving	40
Chapter V	
Gold and Silver Plate	42
Enamelled and Niello Wares	47
Chapter VI	
Tinned Metal Ware	51
Damascened Ware	52
Tanjore Encrusted Ware	53
Bidri Ware	55
Chapter VII	
Copper and Brass Wares	59
The Art of Metal Work in Nepal and Tibet	68
Chapter VIII	
Carvings in Jade and other hard Stones	79
Chapter IX	
Calico Printing	81
Tie-Dyeing or Knot-Dyeing (Bandhani Work)	84

Patola Silks 87
Painting and Waxing in Calicos 88
Tinsel Printing 91

Chapter X

Muslins—Plain and Figured 91
Figured Muslins 92
Silks—Plain, Striped, Checked, and Flowered 92

Chapter XI

Brocades, Kimkhabs and Cloths of Gold 95
The Himrus or Cotton and Silk Brocade 98

Chapter XII

Embroidery 98
Darin, Satin, Stem, and Feather Stitches in Indian Embroideries 99
Tent, Cross, Knotted, Herring-bone and Button-hole Stitches 99
Punjab Darn Stitch 100
Kashmir Shawls 101
Kathiawar Choklas 106
Chain Stitch 107
Embroidered Bhuj Petticoat 110
Chikan Work and Drawn Stitch 110
Kamdani or Gold and Silver Embroidery on White Cloth and Muslin 111
Gold and Silver Wire Embroidery 112

Chapter XIII

Carpets 114

Chapter XIV

Arms 116

Chapter XV

Indian Musical Instruments 121

CHAPTER I

COPIES OF AJANTA FRESCOES

Gallery VII. Intermediate Floor

So much has been written about the Caves of Ajanta in recent times that it would be useless to go into detail. Only a few relevant points are given below.

Situation of Ajanta Caves.

The Caves of Ajanta lie in the territory of the Nizam, and are within easy distance from the following Railway Stations: Jalgaon on Tapti Valley and G.I.P. Railways, Aurangabad on Nizam's G.S. Railway, and Pahur on Pachora—Jamner Railway. The Caves are situated four miles from a village called Fardapur, and are cut in one of the Ghats, which marks the boundary of the Deccan from Khandesh. They are cut in a semi-circular scarp of a rock 250 feet high surrounded with verdant forest, with the beautiful stream Waghora flowing on one side.

Dates of the Paintings.

The Caves of Ajanta number twenty nine. They have been painted at different times, covering a period over seven hundred years. The earliest of these Caves, IX and X date back to the first or second century B.C., and the latest, I, II, and XVII belong to the sixth or seventh century A.D.

Method of Painting.

The surface of these wall paintings was prepared by applying a coating of a mixture of clay, cowdung and pulverised rock, which was thoroughly pressed in the cavities of the rocks. In some instances, especially in the ceilings, rice husk was used. The outline was first put in brown, black or red, and then the local colours were filled in flat washes, on which details were painted.

Description of the Copies of the Ajanta Frescoes.

The copies of Ajanta Frescoes presented to the Museum by the Right Hon'ble Sir Akbar Hydari belong to Caves Nos. I, II and XVII, which date back to the sixth and seventh centuries.

As soon as we enter Gallery VII on the Intermediate Floor we see at the other end the magnificent picture of Padmapani with his attendants (Nos. 11, 12 & 13, Cave I). To the left of the above picture may be seen one depicting an episode from the Vessantara Jataka No. 1, Cave XVII). The story tells how Prince Vessantara gave away the magical elephant which brought rain to his country, to relieve the drought-stricken people of Kalinga, for which he was banished from his kingdom. While on his way to the forest he

Fig. 1. Prince Vessantara giving away his children to the Brahmin Jujuka. Cave XVII.

gave away his children as a gift to a Brahmin named Jujuka. This last episode forms the subject matter of this painting (Fig. 1). In the lower panel is to be seen the picture of a woman (No. 25, Cave I). To the right is the bust of Bodhisattva Padmapani (No. 43, Cave I) in the upper panel, and the picture of a man wearing long hair and a short kilt in the lower (No. 23, Cave XVII). Beginning from the end of the gallery, on the right, may be seen a beautiful scene from Cave XVII illustrating an espisode from the Mahisa Jataka (No. 14). The story goes that once Bodhisattva was born as a buffalo. Once while roaming in the forest a monkey settled down on his back and shook him by the horns, this episode is represented in the painting. The Bodhisattva stood this patiently, but at another time when the monkey tried this trick on another buffalo he was trampled to death. On the same screen may be seen a lady doing her toilet (No. 10, Cave XVII). In the lower part of the screen are the figures of Gautama Buddha (Nos. 16 and 35, Cave I). On the second screen may be seen an episode from the Matriposhaka Jataka in which the capture and release of an elephant (No. 2, Cave XVII) are depicted. The story goes that the King of Benares lost his State Elephant. A forester was saved by the Bodhisattva in the form of a white elephant, which was betrayed by the man whom he had saved. The Bodhisattva was captured and brought before the king. As he did not take any food in his captivity the king asked the reason and was told that he was anxious to serve his blind mother. The king hearing this released him. On the third screen may be seen various scenes from Caves I, II and XVII,—a Royal Couple (No. 22), and a beautiful toilet scene (No. 29) in which two women are doing the hair of a third. In the middle panel, "Mother and Child" (No. 15) adoring Buddha, are shown. In the third panel, upper compartment, may be seen the figure of a woman (No. 20), and in the lower a lady having

a tete-a-tete with her companion (No. 31). Two pictures of "Heavenly Musicians" floating in the clouds (Fig. 2) playing on musical instruments (Nos. 9 and 42, Cave

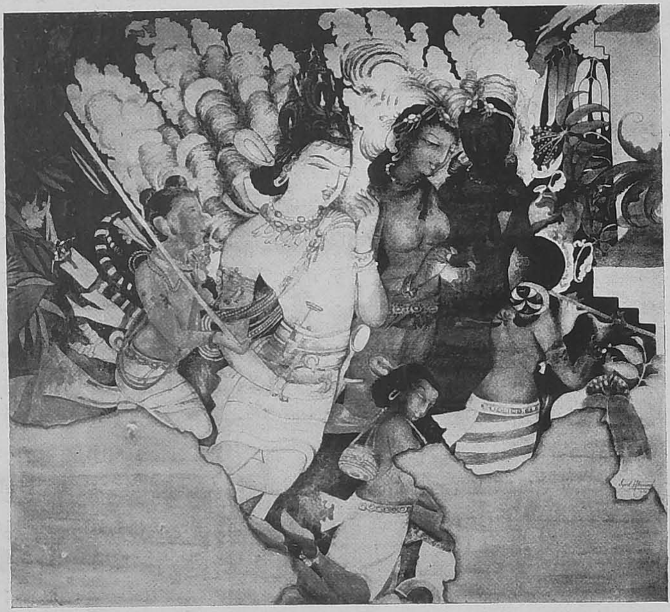

Fig. 2. Heavenly Musicians.
Cave XVII.

XVII) are seen on the fourth screen. The third picture depicts two women from a panel offering lotus flowers to the Bodhisattva (No. 27, Cave I). On the fifth screen may be seen a line drawing of a palace scene (No. 5, Cave I), where the king is engaged in conversation with his consort, surrounded by female attendants.

Beginning from the end of the gallery, on the left side of the wall, may be seen on a part of the panel the picture entitled "The King of Benares honouring the Golden Geese" (No. 24, Cave XVII). The lower panel of the second group of pictures depicts a famous dancing scene (No. 8, Cave I). In the upper three pictures, two are of female attendants (Nos. 40 and 41, Cave XVII), and the central one that of an elephant rider with other

figures forming part of the panel entitled "Questions of Buddha to Sariputra" (No. 21, Cave XVII). In the third group the lower four pictures are apparently scenes from conjugal life,—"Raja sitting with his Wife", "Offering Lotus Flowers to the Bodhissattva", women chatting, etc. (Nos. 17, 18, 19, & 44, Cave I). In the upper group is a representation of drinking and love scenes (Nos. 33, 34, and 37, Cave XVII); the other depicts "Musicians flying through the air" (No. 3, Cave XVII). No. 4, Cave I, of the fourth group of pictures represents a king and ladies of the court sitting in the palace gossiping among themselves. In the fifth group the lower one is from Ajanta (No. 6, Cave I) depicting a Bacchanalian scene, where Iranians, wearing high caps, are enjoying drinks; on two sides may be seen beautiful decorative patterns from Ajanta (Fig. 3).

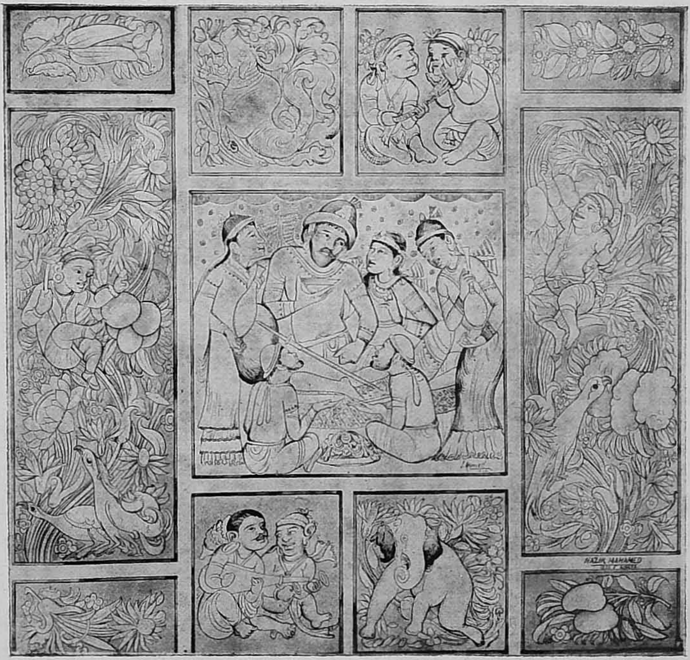

Fig. 3. Bacchanalian Scene.
Cave I.

Near the entrance is a scene from Khantivadi Jataka (No. 7, Cave II). It is said that a cruel king of Benares named Kalabu tortured the Bodhisattva to death for preaching the truth of patience to his nautch girls after they had lulled him to sleep. In this picture the king is ready to strike down the Bodhisattva, and the dancing girls have fallen at the king's feet to save the Bodhisattva. On the right hand of the entrance is an outline drawing in sepia, showing a king and his consort (No. 36, Cave XVII).

CHAPTER II

MINIATURE MUGHAL PAINTING

(Indian Picture Gallery IV)

With the advent of the Mughals on the scene Indian painting received a fresh impetus and drew inspiration from the pictorial art of Iran, which had reached its zenith under the rule of cultured Timuride princes, especially Baisunghar Mirza, the patron of Mir Ali and Sultan Husain Mirza (A.D. 1473-1506) in whose court flourished the famous painter Bihzad, who by universal testimony was the greatest miniature painter Iran ever produced.

The final battle for the mastery of India was fought by Babur at Panipat in 1526. Ibrahim Lodi the Sayyid king lay dead on the field and the sceptre of authority passed into the hands of Babur. Babur's trouble however had not ended with the conquest of Delhi; they had just begun, and for the brief tenure of four years of his life he fought hard with the Afghans and Rajputs to establish his authority on a firm basis.

Babur. Babur's love for the masterpieces of Iranian miniatures of Bihzad whom he mentions with enthusiasm in his memoirs, shows him to be fairly acquainted with the art of Iran. His artistic

temperament is also reflected in his enthusiasm and deep appreciation of the beauties of nature. But this trait of his character was of no avail in establishing the Mughal School in those stormy days when everything depended on his personal valour to suppress the hitherto uncurbed forces. He could ill afford any time in such conditions to encourage painting; neither he had any painter in his entourage.

Period of Humayun.

(1530-1540 and 1555-1556). The first part of Humayun's reign in India was too much occupied in quelling disturbances and fighting in Gujarat and elsewhere, which resulted in his finally quitting India, defeated by the forces of Sher Khan, the Afghan Chief of Bihar. After many hopeless wanderings in which he was again and again deserted by his treacherous brothers whom he loved with the tenderness of a father—a thing unknown in those times—he had to flee for his life to seek protection of Shah Tahmasp, the ruler of Iran, a prince of great culture and refinement. During his stay there he was greatly impressed by the artistic achievement of the Iranians. He met at Tabriz

Humayun and the beginning of the Mughal School.

the famous painter Mir Sayyid Ali whom he invited to India after he had regained the throne, to execute for him the illustrations of Amir Hamzah, or Romance of Amir Hamzah, the uncle of the Prophet Muhammad. His exploits in the cause of Islam are recorded in the story which is full of fantastic episodes of Hamzah's fight with demons, etc.

***Illustrations* from Amir Hamzah.**

The illustrations which were to number 1375 were executed on canvas. The work was carried out under the expert superintendence of Mir Sayyid Ali, under whom worked a number of foreign and Indian artists. The work however was not destined to finish within the lifetime of Humayun who died in 1556 and was continued after his death under the superintendence of Abdul Samad. It

was, however, completed in the early years of the reign of Akbar. A part of the voluminous work of Amir Hamzah which has survived to us now rests in the Industrial Museum, Vienna, South Kensington Museum, Boston Museum, Metropolitan Museum, etc.

Style.

A brief examination of the paintings reveals that they were directly inspired by Iranian tradition, but Indian influences are equally apparent especially in the delineation of costume and ornaments, figures of women, as also in the expression of vigorous movement and sense of overwhelming force. It may be said that Iranian sensitiveness of drawing and colours are happily combined with Indian realism. This may not be wondered at as Indian painters were also employed in the execution of this work, and though they had to conform to the ideals of colour, finish and technique of their Iranian superintendents, nothing could stop them from bringing into their work their own traditions and concepts. This happy compromise between old and new—Iranian and Indian—brought into being the Mughal School of painting.

Period of Akbar.

Akbar (1556-1605) was a boy of thirteen when he came to the throne. Troublous times awaited him. With firm grasp of the situation he rose to the occasion. One by one the disruptive forces were dealt with properly, and within his lifetime he brought the greater part of India under his control and established peace and tranquillity. He was not only a great statesman and conqueror but a great visionary whose eclectic tendencies in the sphere of religion; his wide spirit of toleration which accommodated all forms of religion, won for him the praise of many and apathy of few.

His view towards pictorial art. Growth of Mughal School.

In the sphere of art his enthusiasm is well known. While at Kabul he himself received lessons in drawing, and once in power he did all he could to encourage the

gentle art of painting. His religious eclecticism was also a great boon for the Mughal School of painting, as according to the strict tenets of Islam painting is a form of idolatry not to be tolerated by the faithful. His views on painting are well illustrated in his famous dictum in which he declared that the painters had better means of recognising God because by copying the objects of His creation they found out that the copies were after all copies, and could never reach the perfection of His creation. In this the painters recognised their imperfection and the glory of God whose creation was inimitable. To encourage the art of painting he opened a separate department (*Karkhana*) with a superintendent who produced every week before the Emperor the works of superior merit, and the Emperor rewarded these painters according to the merit of their works. Besides this a careful enquiry was made into the nature of colours; and only the best refined colours were to be used.

Illustrated Manuscripts. With such enthusiasm and royal patronage it is not to be wondered at that the art of painting progressed in leaps and bounds. The form of painting was however confined to book illustrations. Historical works, such as Babur-namah, Tarikh Khandan Timuriya, Tarikh Rashidi, and Akbar-namah were produced with most sumptuous illustrations. Nor were the Hindu classics neglected. Mahabharata, under the name of Razman-namah, was illustrated, and now forms the treasured possession of H. H. the Maharaja of Jaipur. This book is believed to have cost £40,000 to produce. Iranian classics also received sympathetic treatment. Khamsah of Nizami, now in the possession of Mr. Dyson Perrins of Malvern, and the Oxford copy of Baharistan by Jami are beautifully illustrated examples of Mughal art. The art of portraiture was also not neglected, and we are told by Abul Fazl that the portraits of officers were made by order of the Emperor. Unfortunately many portraits have not survived.

Renowned painters. Improvement in technique and colours.

These book illustrations referred to above are highly finished, and no pains were spared to make them worthy of their possession by the royalty. The painters employed in illustrating these books were mostly Indians, with a sprinkling of Muhammadans including Iranians. Abul Fazl enumerates several names including Daswant, Basawan, Mir Sayyid Ali, Abdul Samad, Farrukh Qalmak, etc., whose art had drawn special attention. This preponderance of Hindu painters gave a truly national character to the paintings of the period. The earlier exhuberance was being controlled, overcrowding was being avoided colours were generally gaining depth, and the realistic treatment of the human figures bestowed them with individuality and character, which in Iranian art, where the same facial type is repeated again and again to the great monotony of the onlooker, is avoided. But Iranian influence in the treatment of landscape is quite apparent, also the high finish of the miniatures is distinctly Iranian. In the matter of colouring however the colours employed have the character of enamels; they stand out in sharp contrast or harmony with one another but do not 'melt' softly into one another, which is a distinct characteristic of the paintings of Jahangir and Shah Jahan periods.

Nobles and the art of Painting.

It is erroneous to believe as has been hitherto that the art of Mughal painting was confined simply to the court. We have evidence that even high officers of state had their own painters. Thus we know from the Maasir-ul Rahimi that Abdul Rahim Khan had his own set of painters. There may have been many more nobles with their painters who might have copied painting from Imperial collection for the benefit of themselves. Only on this basis we can explain the presence of a number of stray paintings from the Razmanamah, etc. which though having all the characteristics of the school of Akbar lack the high

finish of the book illustrations which were executed for the Emperor himself. They also do not bear sometimes the names of the painters, a special characteristic of the illustrations kept in the Imperial Library for the use of the Emperor.

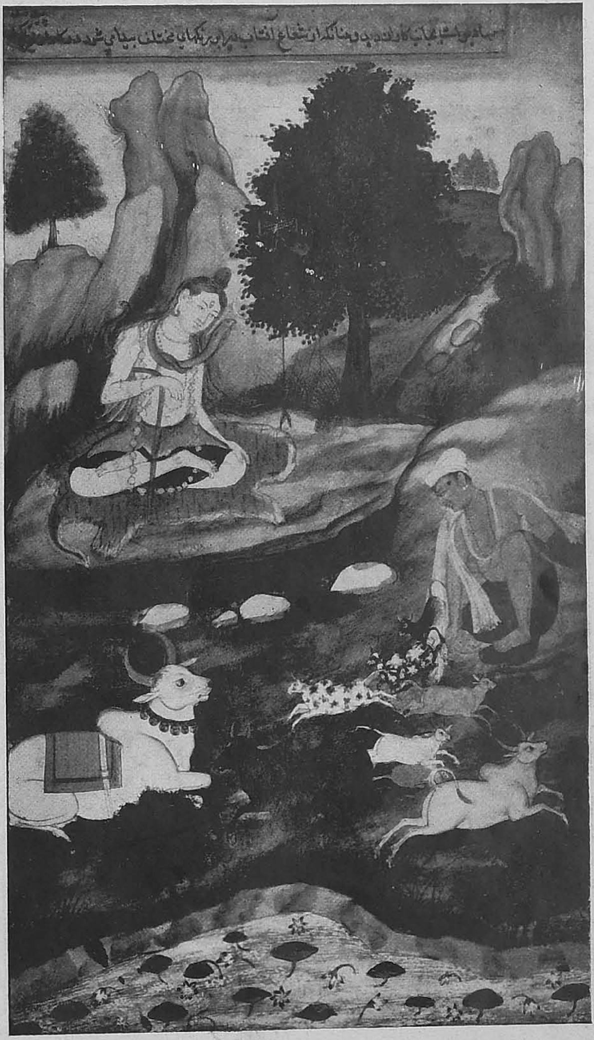

Fig. 4. Mahadeva and Prajapati.
Delhi School. Late 16th century.

Examples:

Miniatures of Akbar period in the Museum.

The Museum has two miniatures from an illustrated version of the Mahabharata which might have once formed a valuable collection of some nobleman. One depicts the story of Mahadeva and Prajapati (No. 26.4706, Fig. 4) in which Mahadeva has been depicted casting an angry look over Kamdhenu and other cows and calves turning their natural colours. The movement of the cows and

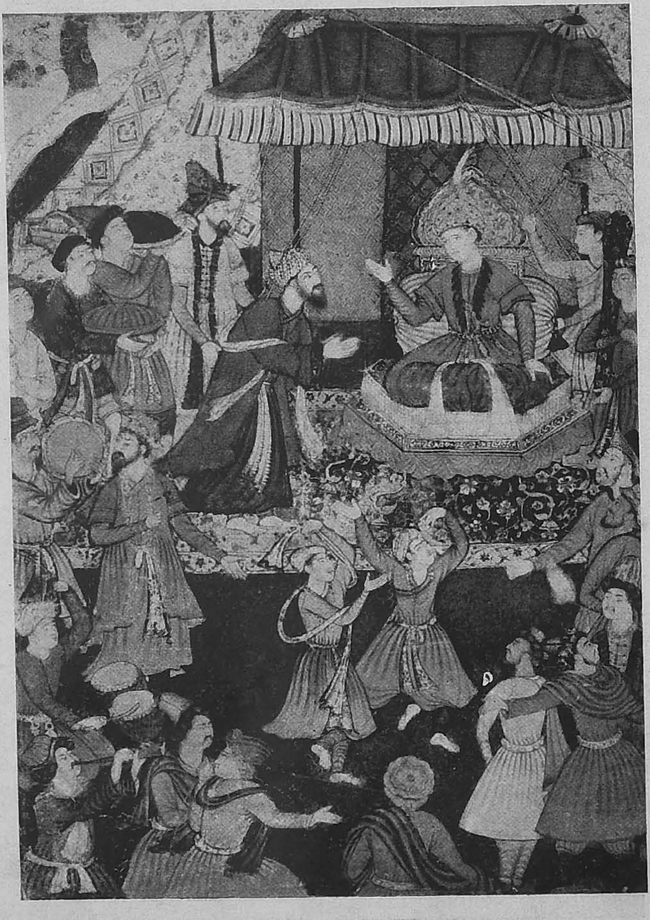

Fig. 5. Darbar of Akbar.
Delhi School. First decade of the 17th century.

Fig. 6. Emperor Timur with his Courtiers.
Delhi School. Late 16th century.

calves are beautifully depicted. In the second picture Bhishma is enlightening Yudhisthira on the advantages of mutual co-operation (No. 26.4707). Several paintings from the different copies of the Mahabharata given on loan by the Right Hon'ble Sir Akbar Hydari are exhibited in Gallery VII on the Intermediate floor. Another beautiful picture of the same period (No. 555, Fig. 5) depicts the darbar of Akbar with dancers and musicians, and the officers offering presents. The picture may be assigned to the first decade of the seventeenth century. One of the most charming pictures of Akbar period is, however, that of Timur (No. 15.286, Fig. 6) seated with his officers on the banks of a rocky rivulet patting a hobby hawk.

Artistic temperament of Jahangir.

Jahangir inherited from his father a peaceful kingdom and a highly organised bureaucracy. His comparatively peaceful inheritance left him ample time to pursue artistic vocation, which was uppermost in him, with equanimity. The pages of his memoirs bristle with his love of nature with its flowers and fountains, animals and birds. So great was his enthusiasm for beautiful flowers and birds that often he would stop on his marches to gloat over these, and he often made it a point to possess the record of the objects of his enthusiasm by ordering their likenesses to be taken by the painters who accompanied him on his tour.

Famous Painters of Jahangir Period.

The art of painting received great patronage from him. He claims to be a great critic of painting, and says in his memoirs that such was his power of observation that even if several painters were employed at one painting he could recognise the separate part played by each painter. He mentions in his memoirs the great painters of the day, Farrukh Beg, Bishan Das, Abul Hasan, and Ustad Mansur.

The art of portraiture and animal and bird drawing.

With such a connoisseur and critic at the head of the State pictorial art flourished and assumed a character hitherto unknown. The age of book illustration was over, and though in the early years of his reign an illustrated version of Anwar Suhaili was produced, the bulk of the paintings of this period was concerned with the representation of various episodes in the life of Jahangir. Portraits of officers of State were also produced. But above all are beautiful studies of birds and beasts which give us respite from great number of court scenes, with all its pomp and splendour, tending to monotony.

Further improvement in technique and colours.

In the time of Jahangir technique of Mughal painting was vastly improved under his ever watchful eyes. The lines assume a character of their own. They are not overflowing; always reticent, never adroit; the colours losing much of their former enamel-like brightness gain in depth; and different colours shade off into one another harmoniously, never standing in glaring contrast with one another. Even in the treatment of landscape, especially in the representation of trees, the Iranian sinuosity gives place to European realism.

Miniatures of Jahangir Period in the Museum.

The Museum possesses many beautiful paintings executed in the reign of Jahangir. The most treasured possession of the Museum of this period are however two paintings executed by Manohar, a famous painter of the age, representing two incidents from the visit of Jahangir to the mausoleum of Khwaja Muinuddin Chishti, a medieval Muslim saint of great renown, held in great esteem by himself and Akbar. In No. 15.280 that part of the incident is represented in which Jahangir at the sight of the mausoleum quitted his horse and walked on foot. The Emperor is himself not represented; his connection with the incident being indicated by an inscription overhead. In the second painting (No. 29.6257, Fig. 7) Jahangir's

Fig. 7. Jahangir's visit to the Mausoleum of Khawja Muinuddin Chishti at Ajmer. Delhi School. Painted 1613 A.D.

actual visit to the mausoleum is represented. He is shown seated under a baldachin on the right attended by courtiers, with Prince Khurram standing before him; and on the left beggars of the town are being distributed food cooked in the cauldron presented by Jahangir to the mausoleum of the Khwaja. This visit took place in the year 1613 A.D. and is described in the memoirs of Jahangir. A picture depicting an incident at a well in

Fig. 8. Bust of the Emperor Jahangir.
Delhi School. Early 17th century.

which a maiden is offering water to a soldier (No. 15.309) is also a good example of the painting of this period. Another picture where a dying dervish is looked after by a prince (No. 15.272) is full of pathos. Among the portraits of this period may be mentioned a bust of the Emperor himself (No. 15.260, Fig. 8); standing portrait of Khan Khanan (No. 15.236, Fig. 9); and two other noblemen (Nos. 15.235 and 15.237). Among many bird and animal drawings of this period special mention may be made of No. 15.292, Iranian Ibex, Male and Female Nilgai (No. 15.304, Fig. 10), Buffalo attacking Lion (No. 15.285), Indian Hobby Hawk (No. 15.302, Fig. 11), and Camel Fight (No. 15.277, Fig. 12).

School of Shah Jahan (1627-1658)

The reign of Shah Jahan is marked with tremendous activities in the sphere of Mughal architecture, and the buildings of the period may truly claim for themselves a very high place in the history of Indian architecture, both as regards nobleness of design and superb decoration. But the same could not be said of the art of painting which does not seem to have received the same degree of patronage as by the predecessors of Shah Jahan. The art of painting however moved on by the sheer

Fig. 9. Portrait of Mirza Abdur Rahim Khan Khan Khanan.
Delhi School. Early 17th century.

momentum it had received during the previous reigns. The painters in the period of Shah Jahan aimed most at the high finish, and no pain was spared either in the selection of colours, or in the manipulation of studied lines, or in the delineation of minutest decorative details, to give these paintings a very high finish. But in spite of all that there is a certain stiffness in drawing which is not very pleasing. This may be due to the strict court etiquette which makes a man more wooden and unpliable. In this period many darbar scenes, individual portraits of princes and officials of the State, and scenes

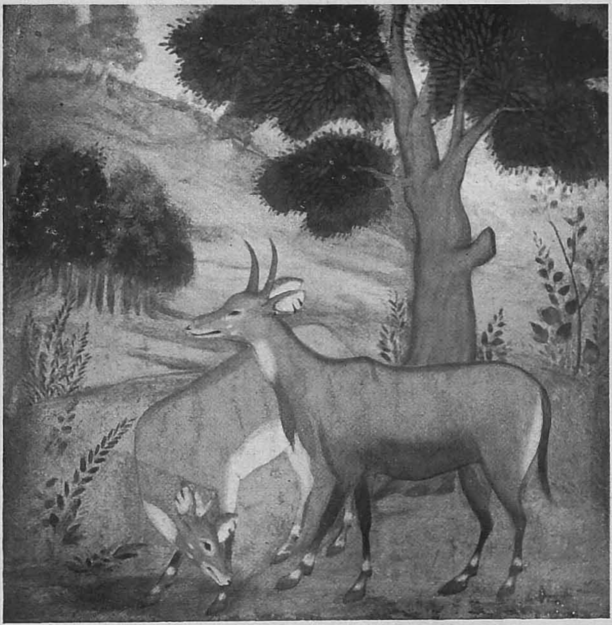

Fig. 10. Male and Female Nilgai.
Delhi School. Early 17th century.

dealing with the lives of sufi saints, were produced in large numbers.

The Museum has many charming portraits of this period, some of the most charming however being (No. 15.250) slightly coloured line drawing of Dara Shikoh and Namdar Khan, (No. 15.252), portrait of Jaswant Singh the ruler of Marwar, by Anupchatr (No. 15.278), portrait of Shah Jahan in his old age and (No. 15.303, Fig. 13) Emperors Babur and Humayun. Among the scenes depicting Sufi *Dervishes* may be mentioned a group of Fakirs (No. 15.301), and a highly finished picture of Sufi *Dervishes* listening to music (No. 15.297, Fig. 14).

The Mughal painters of this period frequently copied European paintings depicting Biblical subjects introduced to the Mughal court by Jesuit Fathers. One such

Fig. 11. Indian Hobby Hawk.
Delhi School. Early 17th century.

painting (No. 15.291) labelled "Madonna and the Babe" is a fine example of an European subject being treated by an Indian artist.

School of Aurangzeb (1658-1707).

With the accession of Aurangzeb begins the decline of the Mughal school of painting, though it must be said that signs of decadence had set even in the later years of Shah Jahan's reign. Bernier a French traveller records that the painters were thrown out of employment, and the *Omrahs*, who forced the painters to work for them, paid them niggardly.

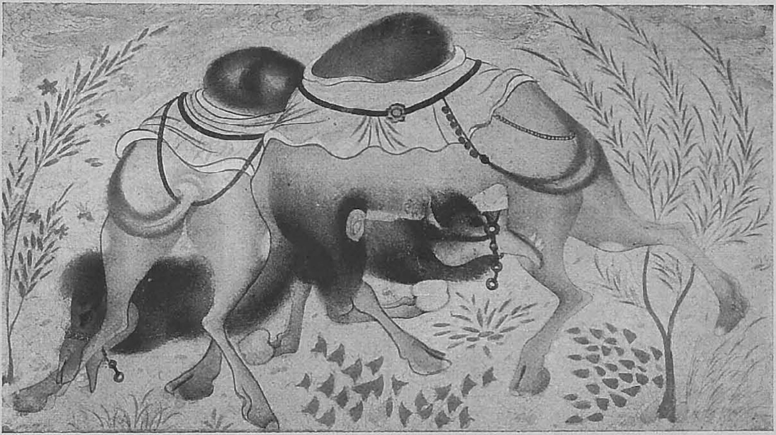

Fig. 12. Camel Fight.
Delhi School Early 17th century.

In such state of affairs it was natural that the art of painting without patronage suffered. The advent of Aurangzeb on the scene hastened its downfall, as his apathy to music and art is well known. Being a strict Sunni he could not tolerate any form of idolatry, and the paintings of the period reflect the fact that art had ceased to attract the attention of the court. The painters continued to produce works of inferior quality to cater the taste of the bazar devoid of high finish. The colours used are poor in quality, and the line weak and faltering. The examples of this period consist of many portraits of the King, his grandees, and saints, etc. Occasionally darbar and bath scenes were produced. Scenes mainly dealing with life in the harem also became a favourite subject as these must have pleased the degenerate taste of the high officers of the State. Only a few examples may be mentioned; 'The Portrait of Aurangzeb' (No. 15.246, Fig. 15), 'Ladies playing Polo' (No. 15.319), and 'Moonlight Scene' (No. 29.6258). Period

Period of later Mughals. (1707-1806).

The story of decadence of the art of painting continues, and sadly reflects the moral degeneration of the puppet kings.

Fig. 13 Emperors Babur and Humayun.
Delhi School. Circa 1650 A.D.

The sexual degeneracy of Jahandar Shah, his infatuation of Lalkuar with whom he indulged in most shameless debaucheries, the happy-go-lucky character of Muhammad Shah are reflected in pictorial art.

Subject-matter of the painting.

In this phase of the Mughal art which lasted till 1759 the subject matter is mainly confined to production of a few portraits

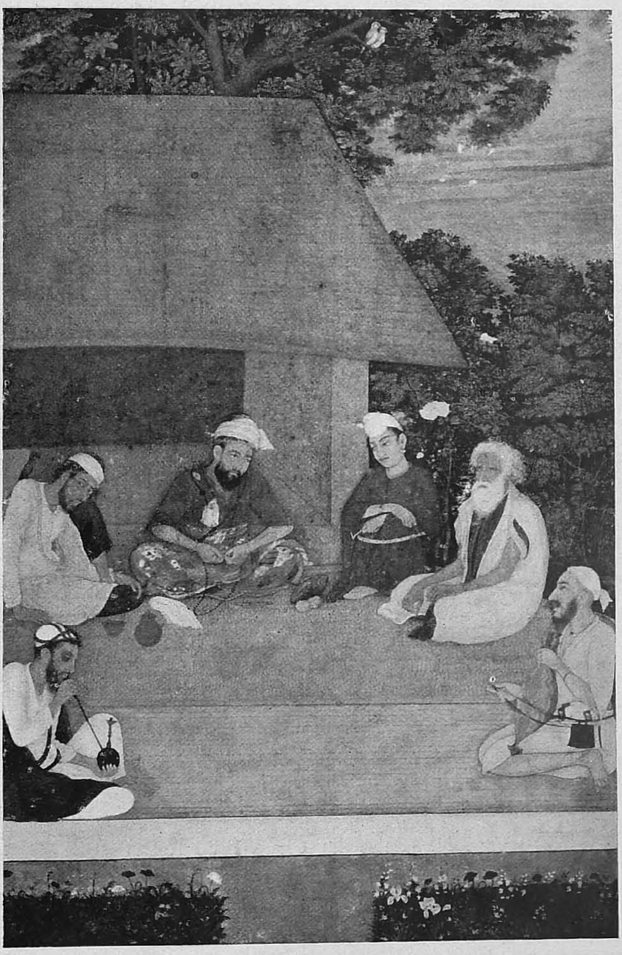

Fig. 14. Dervishes.
Delhi School. Circa 1650 A.D.

but the main theme is confined to harem scenes, kings and noblemen surrounded with women, indulging in drink and music. The subject of Ragmala or musical modes which mostly depict various phases in union and separation of the heroes and heroines, was adopted by the painters of Delhi school, and nowhere the heroic spirit of early Mughal school is reflected. It may be

Fig. 15. Portrait of Aurangzeb?
Delhi School. Circa 1660 A.D.

said however that a certain degree of care is shown with regard to the finest of the paintings, but the drawing is rather poor. From 1759 to 1806, in which reigned the puppet king Shah Alam, the downward march of Mughal school continued.

Copies of older paintings are attempted with very poor result. The drawing is of very poor quality; the figures are in most cases out of proportion, and there is nothing to attract attention. In 1806 the death-knell of the Mughal school was rung; the school which had endured for more than two centuries and had produced paintings of which we can well be proud.

Plate II

Chatrapati Shivaji Maharaja (1674—1680)
Deccani School. Painted, third quarter of the 17th century.

7-AUG 1939

DECCANI PAINTING

The noble art of painting also received great encouragement from the kings of Golconda and Bijapur. King Ibrahim Adil Shah II of Bijapur was a great patron of art and learning and he employed painters who are mentioned in Basatinus-salatin. His successors continued to patronise painting.

Bijapur paintings. The Museum has many beautiful paintings from Bijapur. A picture labelled 'A battle between Rustum Zaman and Shivaji' (No. 15.367) is very forceful. Rustum Zaman was an officer of the King of Bijapur, whom the forces of Shivaji defeated near Panhala in 1660. The portraits of Muhammad Adil Shah (1627-1655), (No. 15.243) and Sikandar Adil Shah (1672-1686), (No. 15.245) are also good examples of Deccani painting. The portrait of Shivaji (No. 15.365, Pl. II) seems to have also been produced by a Bijapur artist.

Golconda paintings. In the State of Golconda the art of painting received its due recognition. Abdullah Qutb Shah (1626-1672) was a great patron of art. A group consisting of Bare Malik, Tanashah, etc. (No. 22.3467) also seems to have been painted in his life time. The portrait of Abul Hasan Tanashah (No. 15.244), and many examples of the painting of his period may be seen in the Indian Painting Gallery.

Canvas paintings. Three canvas paintings entitled (1) "Abdullah Qutb Shah in Procession", (2) "Qutb Shah on Throne", (3) "Chand Bibi and her Maidens" (Fig. 16) are unique examples of Deccan art. These pictures have been given on loan to the Museum by the Right Hon'ble Sir Akbar Hydari. Here the picture "Chand Bibi and her Maidens" is illustrated. Chand Bibi is reclining on a cot surrounded by musicians and attendants. Some of her maidens are enjoying bath in a rivulet. In the background may be seen Ali Adil Shah returning after a bird hunt accompanied by a re-

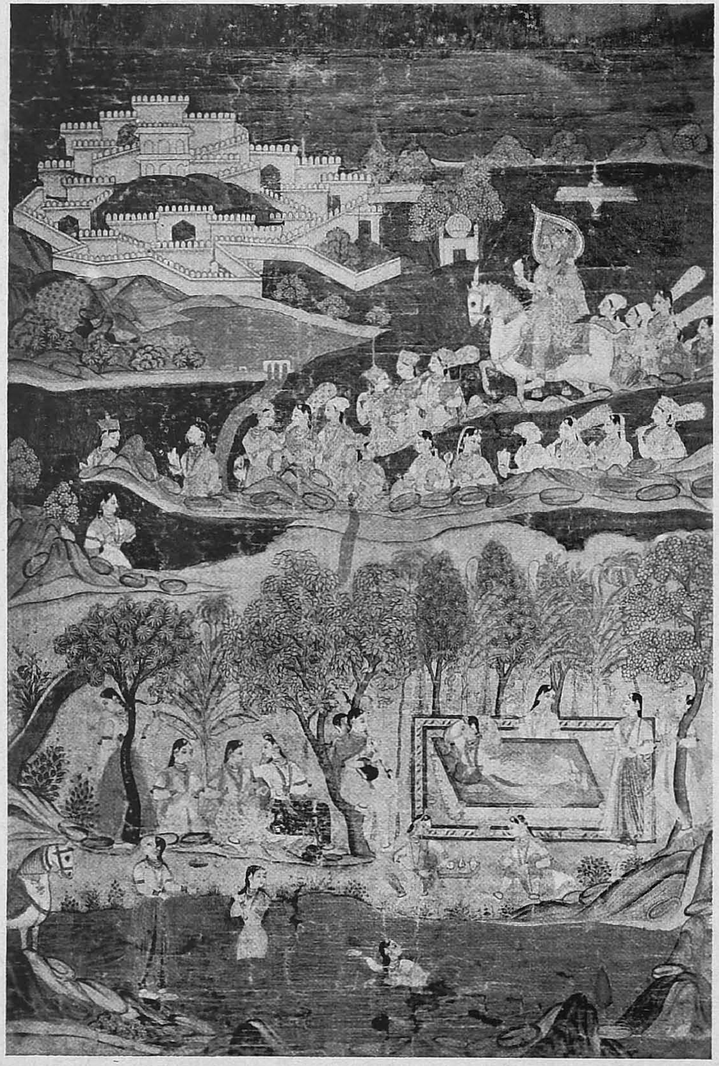

Fig. 16. Chand Bibi and Her Maidens.
Deccani School. Early 17th century.

tinue of women. The picture belongs to the early 17th century.

Another picture (No. 22.3427, Fig. 17) from Hyderabad is very interesting as it depicts a zenana

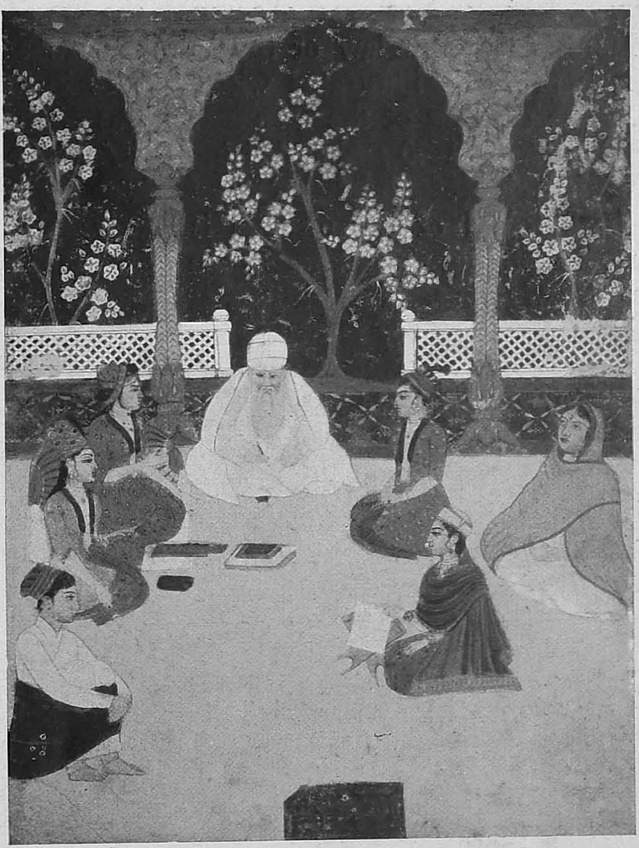

Fig. 17. Zenanna School.
Deccani School. Late 17th century.

school in which the princesses are taking their lessons from an old teacher.

Illustrated Deccani MSS.

The Museum has a number of illustrated Deccani MSS of the Shahnamah, all belonging to the eighteenth century. The most important illustrated MS, however, of Deccani school in the Museum collection is Nal Daman, or the love story of Nal and Damayanti, copied for Mian Dilir Khan in A.H. 1110 i.e. 1698 A.D. The book is written in Persian characters, while the language is Oudhi, a dialect of old Hindi. The pictures are carefully executed. There is also

a copy of Khawar-Namah dealing with the heroic deeds of Hazrat Ali, son-in-law of the Prophet Muhammad, which is profusely illustrated with pictures in Deccani style. The copying of the manuscript was commenced in 1050 A.H. i.e. 1640 and ended in 1055 A.H. i.e. 1645, during the reign of Abdullah Qutb Shah at Hyderabad. The background of the pictures is always plain, the colours bright, and the representation of the various episodes very vigorous. The pictures are the very encyclopaedia of contemporary Deccani manners and customs.

18th century Ragmala Set.

In the beginning of the eighteenth century Hyderabad seems to have been the chief centre for miniature painting, and many portraits of women in various attitudes, and also the illustrations of the Ragmala pictures seem to have been the chief subject. The Museum possesses two sets of such Ragmala pictures.

THE RAJPUT SCHOOL

Subject matter of Rajput paintings.

Contemporary with the Mughal school of painting several indigenous schools flourished in Rajputana and Bundelkhand. These paintings illustrate various phases of the life of Krishna, musical modes (Ragmalas), various phases from the love-sick life of hero and heroine (Nayaka, Nayika Bheda), and twelve months, etc. (Barah-masa).

The Rajput school may be sub-divided in two main groups, namely, Rajasthani (comprising Rajputana and Bundelkhand) and Pahari sub-divided into the Kangra and Jammu schools.

Early examples.

The earliest examples of Rajput painting may be seen in Ragini paintings probably executed in the late 16th century. The Museum possesses several pictures of this school belonging to early seventeenth century. Of these may be mentioned Maulkausa Raga (No. 22.3390, Sir Ratan Tata Art Collection) in which a lady is massaging the hero while two attendants are preparing sandalwood paste.

Late 17th century Rajput paintings.

A series of twelve pictures depicting the festivals and love sports of each month is a most beautiful example of Rajput art the Museum possesses (Nos. 15.329-15.340 Sir Ratan Tata Art Collection). The treatment of the landscape

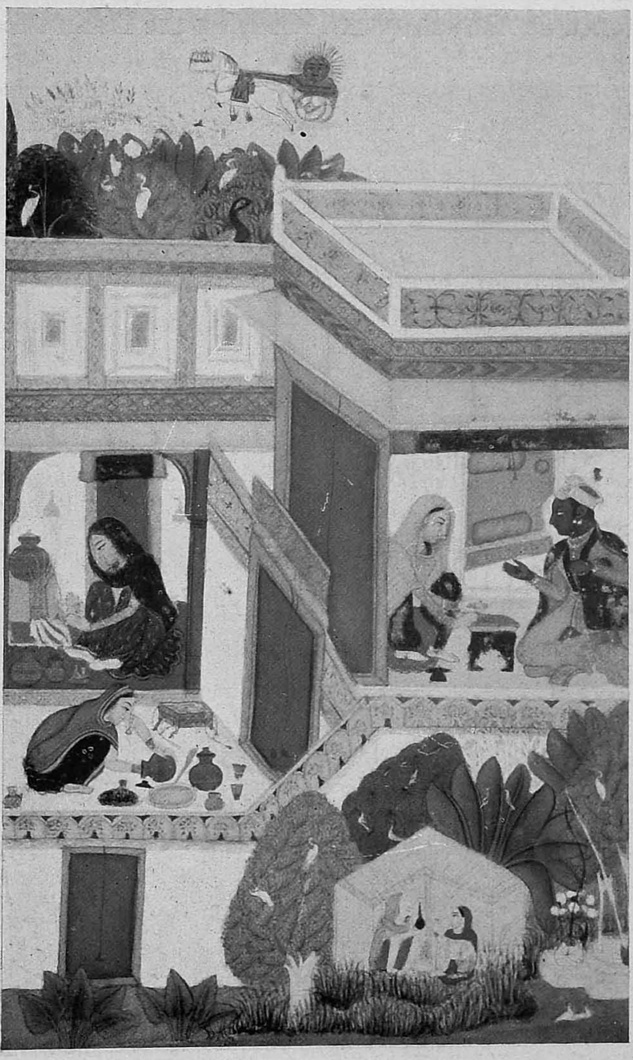

Fig. 18. Month of Margashirsa.
Rajput School. Late 17th century.

is conventional; the colours are brilliant, and the subject matter infused with a lyrical feeling in keeping with the spirit of the poems of Brajbhasha, of which Rajput School of painting is visual interpretation. The month of Phalgun (No. 15.337) is represented by a Holi scene; the month of Kartika (No. 15.333) by ladies performing bath; the month of Ashwin (No. 15.332) by the Dashra festival

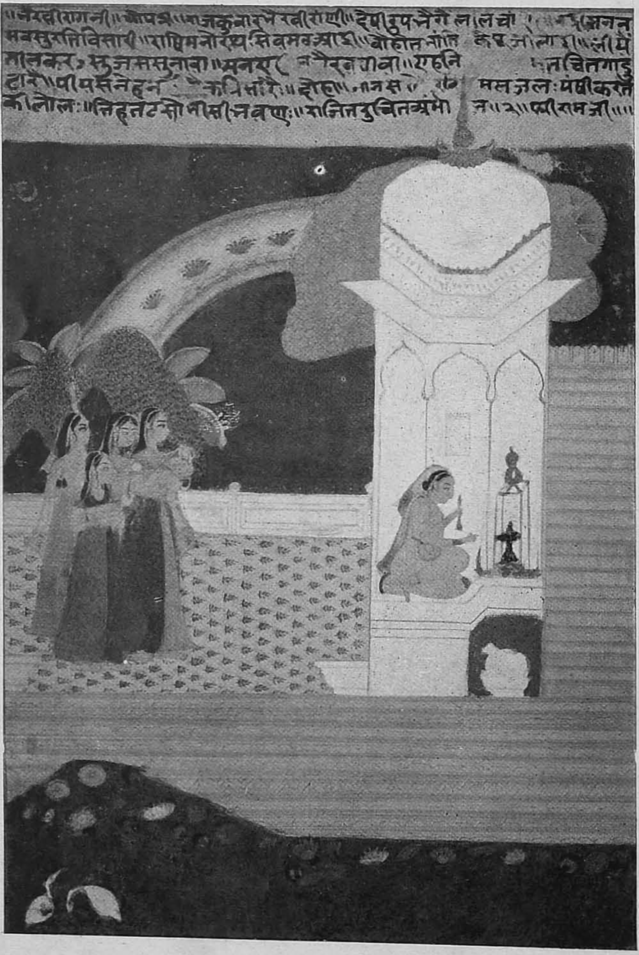

Fig. 19. Ragini Bhairavi.
Rajput School. Early 18th century.

in which the effigy of Ravana is being burnt. No. 15.334 (Fig. 18) illustrates the month of Margashirsha in which winter scene is depicted. On one side the kitchen is depicted in which women are engaged in preparing food; on the right Sri Krishna is talking by the fireside with a woman. In the foreground, by the river side, may be seen a farmer and his wife seated in a hut.

The Museum also possesses an incomplete series of Ragini paintings executed in the early eighteenth century, perhaps at Jaipur. From this series No. 520 (Fig. 19) is illustrated. This is a representation of Ragini Bhairavi, in which a woman is depicted worshipping Shiva on the bank of a river with her attendant standing behind her.

From the collection of Pahari school, or paintings executed in Kangra, in the Museum may be mentioned 'Shiva Worship' (Sir D. J. Tata Collection), which may be assigned to the late nineteenth century.

CHAPTER III

IVORY CARVING IN INDIA

(Gallery IX)

Ivory carving occupied a very important place in the industries of ancient India, and the articles of ivory excavated from ancient sites show to what degree the art had developed. The Mughal Emperors also extended their patronage to this art. Ivory has recently gone out of fashion with the rich people, and hence the industry has greatly suffered with the consequent degeneration of style. Besides ivory from the elephant, fossil ivory, the ivory of the mammoth, sea-horse ivory, and walrus ivory were imported from Siberia and largely used for the manufacture of sword and dagger hafts.

Punjab Ivory. The chief centres of this industry in the Punjab are Delhi, Amritsar, Patiala, Ludhiana, Multan, Dera Ghazi Khan, Gujranwala, Hoshiar-

pur and Lahore. In Delhi and Amritsar the industry seems to have originated with the requirements of the Mughal Court, and subsequently with those of the Sikh Court. The old ivory work of Delhi is characterised by Muhammadan feeling, while the new work has absorbed all styles and has mainly become Hindu. The carving consists of a rich flat arabesque tracery with lace-like perforations arcading mythological or animal panels. Richly designed and carefully finished caskets, glove boxes, table ornaments (in the form of elaborately caparisoned elephants, camels, horses, etc.), also model carriages, a large assortment of card cases, whist-markers and chessmen, etc., are produced to cater to the popular demand.

The collection of Indian ivory in the Museum is both rich and varied. Some beautiful examples of Delhi and Punjab works may be seen in the beautiful carved caskets. Beautiful ivory work of the Delhi manufacture of

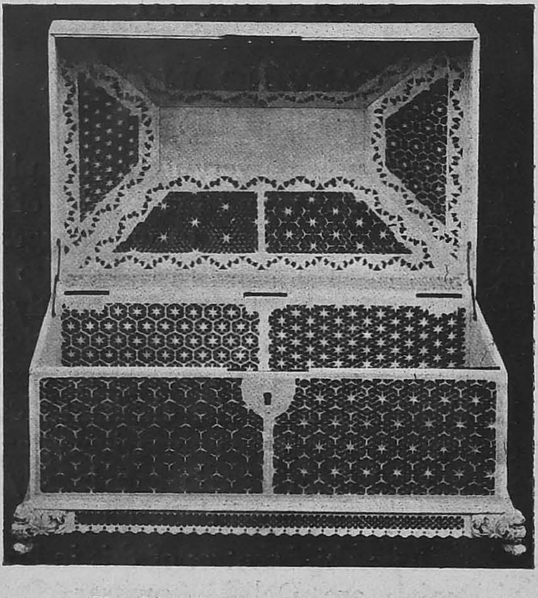

Fig. 20. Rectangular Ivory Box.
Delhi Work. 19th century.

the 19th century is represented by the rectangular boxes —one from the Sir Ratan Tata Collection (No. 22.1907, Fig. 20) and other (No. 28.5228) from the School of Art Collection. The carvings consist of rich flat arabesque tracery with lace-like perforations.

Rajputana and Central India. In Rajputana and Central India there are numerous centres of ivory turnery and carving. Of these special mention may be made of Jaipur, Ajmer-Merwara, Alwar, Bikanir, and the village of Pali in Jodhpur, where there has been developed an extensive manufacture in bangles, surmadanis (antimony boxes), chessmen, etc. Figures of animals are made in Rewa, and paper-cutters, sword-hilts, combs, etc. at Ratlam, Dhar and Alipura. The Museum has a fair number of toys from Jaipur etc., especially elephant riders.

Bengal. In Bengal, Murshidabad, Rangpur, Dacca, Tipperah and Chittagong are the main centres of ivory industry. The tradition in ivory work seems to have been borrowed from Delhi. The industry is confined to a small community called *baskar*. The Bengal ivory workers produce a large assortment of table oranments, such as elephants, models of bullock carts, processions and marriage ceremonies, though in former times they exclusively turned out figures of gods and goddesses. The figure of Durga, a household deity of the Hindus in Bengal, with the figures of Lakshmi, Saraswati, Kartikeya and Ganesha grouped round her is a favourite motif on ivory panels. Caskets from Murshidabad with flat reliefs may also be seen here. There are two fine ivory caskets from Murshidabad. One of them (No. 28.5224, Fig. 21) belongs to the School of Art Collection and is of the 19th century workmanship. The central panel of the lid has the figure of goddess Mahishamardini (Durga). The sides of the box have carved mythological battle scenes. The front side also depicts Durga mounted on a lion fighting

with her enemies. The other (No. 22.1905, Case 6) belongs to the Sir Ratan Tata Art Collection, and dates

Fig. 21. Ivory Casket.
Murshidabad Work. Late 19th century.

back to the 19th century. It has floral and arabesque perforated designs on the panels. The feet are carved in the shape of elephants.

Bombay and Sind.

Though work in ivory was done in the past, in these days a certain amount of turning and carving is done at Poona, Kanara, Surat, Baroda, Karachi, Halla, Kathiawar and Bhuj. An example of Bhuj work may be seen in a circular ivory casket (No. 28.5239), School of Art Collection of the 19th century, in Case No. 7. The lid has carved figures of a hunter, woman and dog. The side panels are decorated with the figures of men and women.

Madras Presidency and Southern States.

The ivory carvings of Travancore State are highly artistic both in conception and execution. In patterns the ivory carvers closely follow the complex and intricate pinnate and palmette floriation interspersed with grotesque animal forms of the Chalukyan temples. In recent times caskets, looking-glass frames and images of gods and goddesses are produced.

Mysore is also a great centre of ivory carving, and produces ivory caskets with panels depicting elephant

hunt and other jungle scenes, and also mythological scenes and figures. The ivory inlaying is also largely developed, and far excels the Hoshiarpur style.

Mysore and Travancore produce ivory exhibits which are rich in artistic effect. Two beautiful caskets in Case 6, of the 19th century, one from the School of

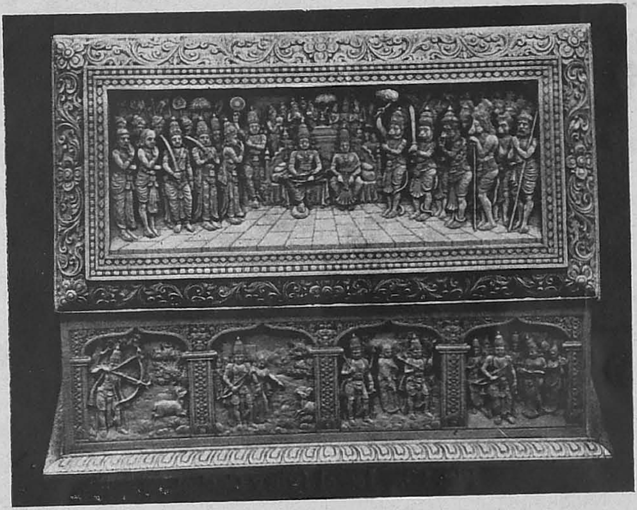

Fig. 22. Ivory Casket.
Travancore Work. Late 19th century.

Art Collection (No. 28.5209) and the other (Fig. 22) from the Sir D. J. Tata Art Collection have their side and lid panels carved with scenes from the Ramayana.

In Madras Presidency proper there are several centres that have a fair trade in ivory. Vizagapatam is the centre of veneered work in India. The carvings are in flat relief, very much like the carvings of Patiala, with none of the exuberance of the Travancore and Mysore styles.

Veneered Ivory. Veneered ivory work of Vizagapatam has been commented upon above, and may be seen in two exhibits of the School of Art Collection in Case 6. A beautiful ivory jewel-casket of late 19th

century (No. 28.5215, Fig. 23) has elaborate mythological scenes for its decoration. The ivory book-cover (No.

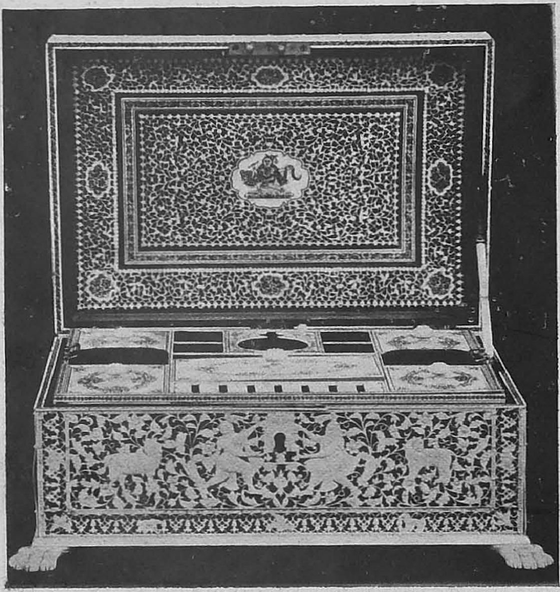

Fig. 23. Jewel Ivory Casket.
Vizagapatam veneered Work. Late 19th century.

28.5227) is delicately decorated with mythological and arabesque designs. Both of these belong to the School of Art Collection.

Tirupati and Godavari have a fair amount of traffic in ivory, but the manufacture is mainly confined to the production of miniature idols.

CHAPTER IV

WOOD-WORK

(Gallery VIII)

Wood has always played an important role in Indian architecture from earliest times to the present day. The decoration in wood has been so rich and varied that with very little effort the migrations of forms and designs,

and the social evolution and eruption of sundry races can be followed in wood carving.

Woods employed for carving.

The chief woods employed for ornamental work in India are teak, *shisham*, *deodar*, sandalwood, ebony, walnut, *tun*, *nim*, Madras red-wood, sal, *rohira, babul, dudhi* or white-wood, red-ceder and jack-wood, etc. The art conceptions seen in the carvings are greatly determined by the grain of the timber employed; deep undercutting is possible with teak, red-wood and walnut, low relief in shi-

Fig. 24 Teak-wood Cabinet after the style of Birbal's Palace at Fatehpur Sikri.
Punjab Work. Early 20th century.

sham and deodar, incised designs in ebony, and intricate and minute designs in sandalwood.

Punjab wood work. Punjab is an important centre of wood work. The chief characteristic of the work is that the carvings are in flat or low relief, with little undercutting. The Museum possesses some beautiful examples of Punjab wood-work. There is a teakwood cabinet (Fig. 24) specially prepared for Sir Dorab Tata after the style of Birbal's palace at Fatehpur Sikri. The superstructure of the palace rests on a tiered plinth. The door and sides are beautifully carved, as also the terra-cotta tiles of the eaves.

Centres of wood carving. The chief centres of woodcarving in the Punjab are Amritsar, Batala, Bhera, Chiniot, Gujerat, Hariana, Hissar, Ludhiana, Hoshiarpur, Jallandar, Kashmir, Lahore, etc.

Bombay wood carving. Wood carving of Gujarat has two distinct forms (1) Jain or Hindu style, and (2) its Muhammadan adaptation and development. The style of wood carving was developed on the same lines as Jain architecture,—horizontal arch and dome, bracket, bracketed capitals, strut and pendents were carved in the same style as Jain temples. The ornamentation was also too intricate but quite in keeping with the spirit of the work.

The Museum has several examples of wood carving of Gujarat in the seventeenth century or even earlier. There is a beautiful painted wooden kiosk in the Archaeological Section elaborately carved with floral patterns and human figures. The style of the jamah worn by the men and women with the sides cut freely, ending in angular projection, was common in the time of Akbar. An example of the modern wood work of Ahmedabad of the Sir D. J. Tata Collection is represented here in a beautiful picture frame carved with the figures of gods and goddesses (Fig. 25).

There are also a number of fragments in the Archeological Section from wooden chariots out of which a piece carved with the figure of a goddess shaded by cobra

Fig. 25 Carved Picture Frame.
Ahmedabad Work. Early 20th century.

hood deserves special mention. A beautiful image of Ardhanarishwara, or Siva embodying male and female principles, is also a very noble example of wood carving of the seventeenth century.

Deccan has also two styles in wood carving, Hindu and Muhammadan. The latter found full perfection in the tomb mosques of Bijapur and elsewhere, and the

former derived its inspiration from the Chalukyan motifs.

The example of Muhammadan style of wood carving may be seen in the railings, tapering fluted pillars found together with engrailed arches and cornices decorated with floral sprays in panels. These have come to the Museum from the Nasik district.

SANDALWOOD CARVING

Sandalwood is the most expensive of woods. It is engraved, inlaid, and veneered in many beautiful forms in India.

Centres of Manufacture. Orissa, Delhi in the Punjab, Indore in Central India, and Ahmedabad produce articles in sandalwood, though the best articles are made at Sorab and Sugar in Mysore, Travancore, Trichinopoly, Tirupati and Madura.

Tools used in carving and method of decoration. The sandalwood carvers in Mysore are known as *gudigars*. The instruments employed in carving are extremely simple, i.e. a saw, a plane, a hone, and assortment of fine chisels. The pattern is either drawn directly on the sandalwood or on a piece of paper pasted over it. "This is then engraved or outlined in every detail; the interspaces between the lines are next cut away, thus leaving the pattern in low relief; and lastly the design itself is carved in the minutest detail by chisels finer and still finer, as the work progresses. In this way every effect of light and shade, every curve and expression, and every texture that may be desired is fully portrayed."

Mysore and Sandal-wood Carving. The decoration in sandalwood carving in Mysore closely follows Chalukyan traditions. The foliage is pinnate, thrown out in fan-like sprays, with the tips of the individual portions rolled up. The elephant-headed animal with foliated tail, or the goose carrying in its bill a spray of flowers are dominant features of the decoration. The

mythological figures are invariably placed within canopied panels, assorted between floral scrolls.

The Museum has several examples of sandalwood carving of Mysore. They are mostly caskets, the most

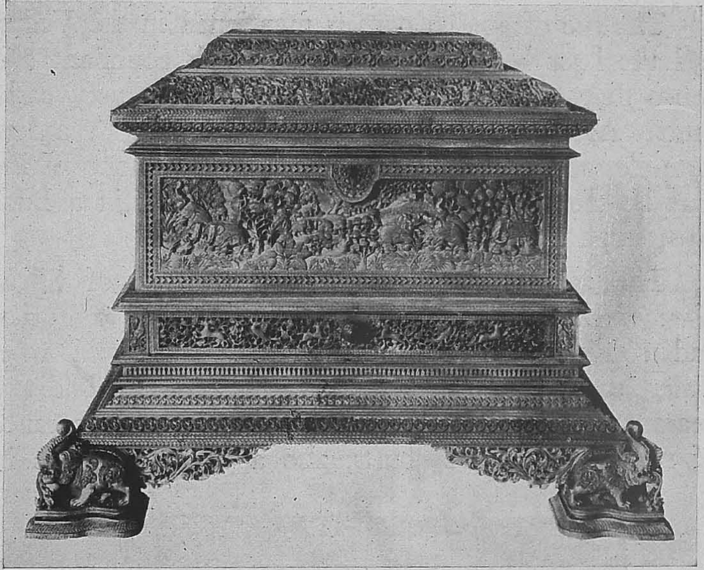

Fig. 26 Rectangu lar Sandalwood Casket.
Mysore Work. Late 19th century

important of them being a rectangular casket (No. 22.3106, Fig. 26) from the Sir Ratan Tata Collection. It rests on four legs shaped like two addorsed elephants emitting floral sprays. The sides are elaborately carved with floral and animal ornaments, the most important being rows of lion and geese, jungle and mythological scenes.

CHAPTER V

GOLD AND SILVER PLATE

Circular Gallery (Top Floor)

The use of golden cups is mentioned in the Vedas, and the later literature supplies us with abundant evidence that golden plates were in use from very early times. Archaeology has also furnished us with a few examples of golden and silver plate work, among which may be mentioned a gold casket found within a Buddhist stupa near Jalalabad.

The earliest examples in the Museum of Silver Plate work date back to the 18th and 19th centuries, and consist of hukka bowls, spice boxes and rose-water sprinklers. The downfall and gradual disappearance of the Mughals as also the disappearance of number of native courts, also a gradual change in

Fig. 27. Silver Salver.
Madras Work. Early 20th century.

their taste, have dealt a heavy blow to this industry. There are, however, artisans who carry out work in trying circumstances and turn out fairly good work in gold and silver plates.

Madras Presidency Silver Plate.

The Madras silver plate may be characterised by the term *swami* because the decoration is composed of mythological figures, medallions, and canopied niches in imitation of encrusted and agglutinated style of work characteristic of South Indian art. The centres of this industry are Madras, Trichinopoly, which specialises in a kind of filigree work, Coconada and Travancore State.

Among silver plate work of the Madras Presidency may be mentioned a fairly large assortment of vases with mythological figures in high repousse. No. 22.1989 (Fig. 27) of the Sir Ratan Tata Art Collection is a salver of beautiful workmanship with mythological scenes, particularly from the Ramayana, in repousse.

Bombay Presidency Silver Plate.

There are two styles in Bombay Presidency silver work, Poona and Cutch; in the former a very deep form of repousse prevails, and in the latter a graceful and intricate floral design in shallow repousse. Poona, Cutch, Bijapur, Sholapur, Baroda, Ahmadabad, are the centres of this trade.

The best examples of silver plate work from the Bombay Presidency hails from Sholapur, and is represented by a beautiful circular tray (No. 28.4876) of the School of Art Collection. It is decorated with gold bands containing vine and floral meander.

A large assortment of silver plate work in different styles was made in the workshop of one Mr. Gill in Bombay by silversmiths from different parts of India. Trays with designs from Gujarat mosques, vases after the patterns of swami work of Madras, etc. are to be seen in the Museum forming a part of the Sir D. J. Tata Collection.

Figure 28 is a reproduction of beautiful modern silver vase decorated with repousse panels depicting scenes from Hindu Mythology: (1) Disrobing of Draupadi, (2) Lakshmi on Throne, (3) Hiranyakashipu, the son of

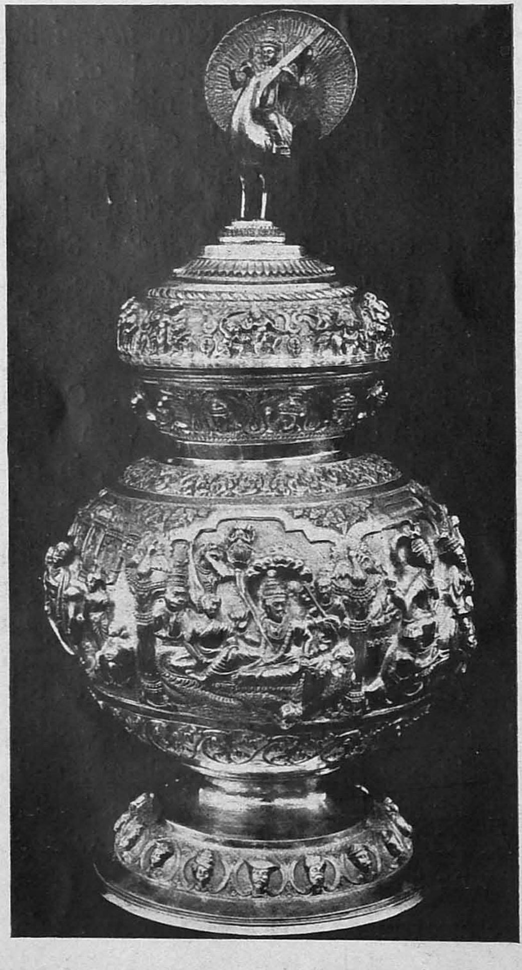

Fig. 28. Silver Bowl.
Deccani Work. Early 20th century.

Diti, the old Mother Earth, ready to kill his son Prahlada, (5) Dhritarashtra, and (6) Rescue of Markandeya. The lid is crowned with the figure of Saraswati on her pea-

cock, and the lower part has in repousse the *Avatars* of Vishnu, etc.

Among some beautiful examples of Cutch workmanship may be mentioned a silver *hukka* (No. 28.4923. Fig. 29) of the School of Art Collection, and an assortment of rosewater sprinklers. The bowl is beautifully decorated with floral scrolls and lobed medallions in repousse.

Panjab Silver Plate. Kashmir style. The wares are chased with intricate and flat repousse, the patterns resembling those employed in copper and papier-mache works of the State. The following patterns are employed: (a) shawl pattern, (b) arabesque style, (c) rosette style, (d) wire work, (e) modern *chinar* or plane leaf pattern. In Lhasa style handles and spouts are in massive dragon form.

A Tea Set of modern Punjab workmanship may also be seen in Case 1, as also some examples of Kashmir workmanship with its shawl pattern designs.

United Provinces. Lucknow, Benares, and Rampur State produce silver plate with no distinguishing characteristic of their own, though sometime back Lucknow produced silver work decorated with a jungle scene which consisted of closely compacted palms.

Of the silver work of Lucknow may be mentioned a pierced gilt *hukka* bowl (No. 22.2040, Sir Ratan Tata Art Collection) decorated with beautiful floral scrolls and sprays. There are also a number of rose-water sprinklers and spice boxes which were probably made in Lucknow.

Orissa. Cuttack Filigreework. Though foreign in origin the filigreework of Cuttack is of considerable importance. From here this trade was carried to Rangoon and Dacca, and also to far removed places like Jhansi in the U.P., and Kotah State in Rajputana.

The work is carried out by children with their nimble fingers and quick eyesight. The frame is prepared by the master craftsman, and then the wire is impinged in the frame by the children. The master silversmith then solders it, and finally it is polished.

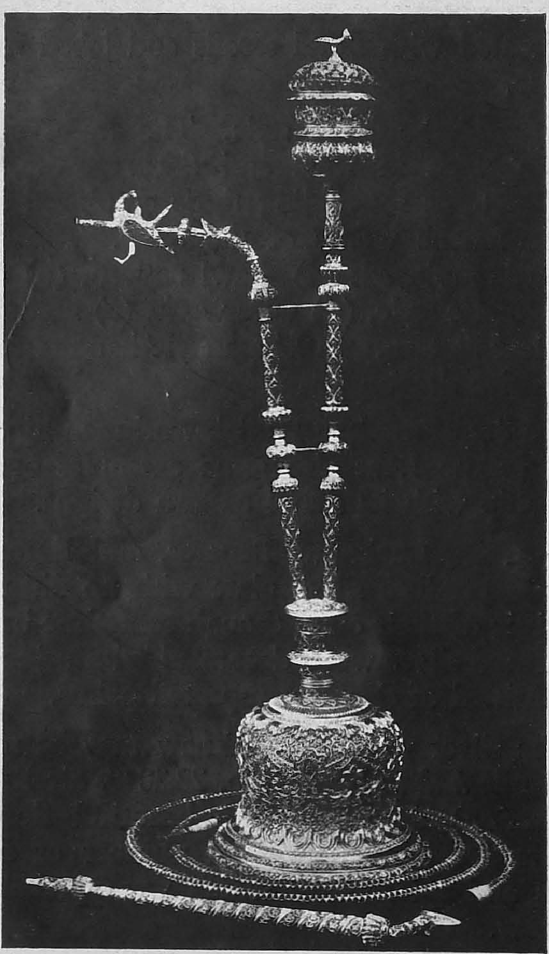

Fig. 29. Silver Hukka.
Cutch Work. Early 20th century.

The Museum has a fair selection of filigree work from Cuttuck which consists of rose-water sprinklers, spice boxes and trays.

ENAMELLED AND NIELLO WARES

Circular Gallery (Top Floor)

The art of enamelling may be described as the art of fusing other mineral substances on the surface of the metal. The range of colour effects obtainable on gold is much greater than silver.

Method of enamelling. There are three forms of enamelling followed in India: (1) Châmpleve, in which the metal is engraved or chased or repoussed or blocked out in such a way as to provide depressions for imbedding the colours. (2) In Jaipur, Cutch, Bahawalpur, Delhi, Lucknow, Benares, and Rampur the pattern is chased, in Kashmir repoussed, and in Multan it is blocked out by dies. In this method those colours which stand the greatest amount of heat are applied first, and others in the order of their fusibility. (3) A special method prevalent in Kashmir is to paint the articles in fusible paint and then to treat it with moderate heat.

The flux used is borax with tin oxide to lower the temperature and to make the enamel opaque. The colours are silicates and borates of the metal. Yellow is obtained by chromate of potash, violet through carbonate of manganese, blue through cobalt oxide, greens through copper oxide, browns through red iron oxide, black through cobalt.

The engraving is done with steel styles. The surface of the pits are hatched to enhance the play of light through colour. Before the application of enamels the objects are cleaned and burnished and then the colours are applied according to the power of resisting fire.

Jaipur enamel. Jaipur stands unrivalled in the art of enamelling. In enamelling gold articles a creamy white was applied as field colour, though the practice in recent times has been discontinued. In olden days sword hilts, plates, etc. were enamelled, but now

sleeve links, lockets, bracelets, brooches, etc. are produced to cater the popular demand.

Other centres. Bahawalpur enamel on gold is characterised by a rich deep blue intermixed with green. In Cutch the whole surface is uniformly coloured only the faintest lines of gold being left by the engravers. Multan produces cheap form of enamelling in blues, yellows and reds. Benares style of enamelling is characterised by the production of large patches in imitation of jewels. Lucknow and Rampur are famous for their enamels. The prevailing feature is an etched pattern on silver in which blue and green with a small patch of yellow and brown are given. The design is burdened with animal form.

The Muesum has a fairly good collection of gold and silver enamelled wares. The beautiful examples of gold enamel may be seen in Case No. 14. A gold dish (No. 28.4996, School of Art Collection) decorated with beautiful floral meander and medallions filled with floral sprays is a good example of the nineteenth century enamel work of Jaipur. In the same case may be seen various enamelled earrings (Nos. 28.4982, 28.4966, School of Art Collection), a small mango-shaped snuff-box (No. 28.4973, School of Art Collection), etc. In the same case may also be seen some brooches, plaque, cigarette case and a *chowka*, all invariably enamelled in Partabgarh style of enamelling depicting hunting scenes.

Of silver enamelling the best examples in the Museum come from Lucknow. *Hukka* bowls decorated with hunting scenes and floral sprays are the best examples of Lucknow enamelling of the eighteenth century. No. 22.2045 (Fig. 30, Sir Ratan Tata Art Collection) is an example of a *hukka* bowl, Lucknow enamelling, richly decorated with figures of peacocks and floral patterns. Goblets (*Surahi*), dishes and boxes, most of them enamelled in Jaipur style, may also be seen in Case No. 4.

Partabgarh enamel. Partabgarh in Rajputana specialises in a peculiar kind of enamelling. The article is made of red or green coloured glass or crude enamel. Then a frame of silver wire conforming with the shape and size of the object is prepared and across it a sheet

Fig. 30. Silver Enamelled *Hukka* Bowl.
Lucknow Work. 18th century.

of fairly thick gold leaf is attached. It is then embedded on lac and the patterns are punched out. The glass is then semi-fused and while still hot it is slipped over the silver and wire and gold sheet. The article is again heated and the gold and glass are united. Before mounting a tin foil is placed underneath the glass to give it brilliancy.

The Museum has a number of beautiful Partabgarh enamelware which have been already mentioned.

Kashmir Copper and Brass enamels. The enamels on copper and silver are not translucent. The patterns are punched and the hollow thus produced are filled

with readily fusible glass paint. The *shawl* pattern, the arabesque pattern, the embossed form and mosaic style are usually met in Kashmir brass and copper enamels.

The Museum has a fairly good collection of enamelled Kashmir brass in Gallery X. There are ewers, spitoons, bowls, etc. Artistically, however, enamelled brass of Kashmir does not attain a very high standard.

Niello Ware. This art now survives in one or two places in Burma. The patterns are punched and chased and the depressions produced are filled with an amalgam of lead two parts, silver one part, and copper one part. The article is then placed on charcoal fire with pieces of cocoanut shell to give dense smoke. The materials fuse and unite with silver. The flux employed is a mixture of borax crude sulphate of ammonia and sulphur. The excess colouring matter is then rubbed off and the silver polished. The design then appears in bright silver on black background. Though the art is now only found in Burma occasionally articles with Indian patterns also appear; their places of origin however cannot be determined as the art is now dead in this country.

Besides some beautiful niello ware from Burma the Museum possesses in Case 4 a few tumblers and dishes which from the point of view of their decoration are definitely Indian. The rich arabesque points their place of origin as Punjab or Kashmir.

CHAPTER VI

TINNED METAL WARE

Gallery X

Centres of Manufacture. Articles from tinned metal are generally manufactured in Kashmir and various towns of Northern Punjab. The Muhammadans use copper ware which are tinned.

Designs employed. In Kashmir the patterns employed are floral rosettes on black ground; the arabesque style consisting of elongated flamboyant figures giving an impression of Arabic inscription and the modern pattern of Persian cones.

The tinned metal ware exhibits in the Museum belong to the Sir Ratan Tata, Sir D. J. Tata, and the School of Art Collections. Examples in the Museum may be seen in Cases 33 and 34. These include ewers, jugs, caskets, trays, salvers, etc. The decoration on them consists of arabesque, chased floral patterns, perforated designs, shawl patterns, diapers, cartouches, cypress tree pattern, Persian inscriptions, etc. A few of these are described below:

A tinned copper ewer of the School of Art Collection (No. 28.5589) is richly chased with diaper, floral scroll, etc., and is of the 19th century Kashmir workmanship.

A 19th century Kashmir work tinned copper ewer (No. 28.5451, School of Art Collection) has dragon-shaped handle and spout; the neck is richly chased and diapered; belly decorated with pole medallions richly chased and the base diapered.

A tinned copper jug (No. 29.5430) of the 19th century Kashmir workmanship is richly chased with floral scroll pattern. It belongs to the School of Art Collection.

A 19th century copper jewel casket (No. 28.5591) of the School of Art Collection has designs all over of floral scrolls and panels containing the figures of birds amidst foliage.

DAMASCENED WARE

Gallery X

The difference between damascening by wire and encrusting is one of degree, as both indicate surface decoration by one or more metals. In damascening proper (*Koftgiri*) it is usual for iron or steel to be ornamented with gold or silver wire. In various forms of encrusted ware the ground metal is rarely steel, and the applied metals are rarely in the form of wire.

Centres of Production. The art of damascening seems to have originated with the idea to decorate sword and dagger handles and shields. However, when demand for these things declined the workers began to produce damascened household utensils. In Jaipur, Alwar, Datia, Jodhpur and Sirohi this art attains a great degree of perfection. Jaipur damascening is characterised by elaborate patterns, while in Sirohi a background of frosted silver is given round the gold. One of the chief centres of damascened arms is doubtless Hyderabad (Deccan).

Punjab damascening methods of production. In the Punjab, Lahore, Sialkot, and Gujarat turn out damascened articles. The material employed are steel plates engraved in minute arabesques into which silver and gold wire are hammered. There are three forms of this work: (1) *Teh Nashan*, in which steel is deeply engraved, and thick wire employed in filling the grooves. It is then filed down and smoothed. Bluish effect is obtained by fire. (2) Shallow *Koftgiri*. The designs are in shallow grooves, and very fine wire is hammered into these. (3) In imitation *Koftgiri* the surface of the steel is smoothen-

ed with file and pumice stone. Then the pattern is scratched and cleaned with lime juice. It is then heated, and gold leaf applied and lightly hammered and then rubbed with an agate burnisher. The gold adheres to the scratched surface.

The damascened and encrusted wares in the Museum collections belong to the Sir Ratan Tata and the School of Art Collections. Gold damascened works in the collection of the Museum generally hail from Sialkot in the Punjab. The following are a few of the examples of this kind of work:

A gold and silver damascened iron salver (No. 28.5437) has the rim and bottom decorated with floral sprays. A gold damascened iron drinking cup (No. 28.5534) and tray (No. 28.5548) have beautiful decorations of floral meanders and birds. Another gold damascened iron salver (No. 28.5132) was made by Nuruddin. Its rim is delicately ornamented with narrow floral bands and cartouches, while the centre has a medallion and narrow bands. These three exhibits in Case 19 were manufactured about the 19th century, and belong to the School of Art Collection.

TANJORE ENCRUSTED WARE

Gallery X

In South India encrustation is carried out in two ways, encrustation in bold relief as in Tanjore; and encrustation in which the applied metal is in level with the surface.

Method of manufacture. It is quite probable that application of silver is of European origin, and that originally brass and copper wire only were used. In these days fine patches of silver leaf blocked out on dies are used for encrustation, while formerly only hand made pieces were used.

The Tanjore encrusted ware exhibits in the Museum Collections belong to the Sir Ratan Tata and the School of Art Collections. They are displayed in Case 38. The following exhibits are worthy of being noticed as best examples of that art.

Fig. 31. Silver Encrusted *Kalshi*.
Tanjore Work. Early 20th century.

A silver encrusted copper *kalshi* (No. 28.5126) of the early 20th century (School of Art Collection) has the top of the belly decorated with a row of geese, and the rest of the ground with diagonally assorted rows of leaves. Another beautiful example of this art which belongs to the School of Art Collection is also silver encrusted copper water vessel (No. 28.5124, Fig. 31) of the early 20th century. The shoulder and neck are decorated with rows of grotesque figures, leaves, rosettes, etc. The belly has the figures of the ten incarnations of Vishnu, etc.

There is also a circular tray (Fig. 32) decorated in the centre with the figure of a goddess with two attendants. The other concentric circles are filled with floral decorations.

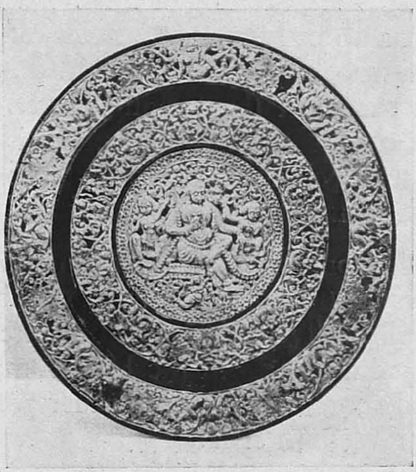

Fig. 32. Circular Encrusted Tray.
Tanjore Work. 19th century.

Punjab work. In the lower shelves of the same case there are examples of encrusted brass bowls and buckets (Case 38, Sir Ratan Tata Art Collection) which have been manufactured at Sialkot in the Punjab. They are invariably decorated with fine tracery of Arabic inscriptions intermingled with floral, arabesque and geometrical patterns.

BIDRI WARE

Gallery X

There exists an industry in the territory of the Nizam which bears the name of the town from which it originated, namely, Bidar. *Bidri* is chiefly used for *hukka* bowls, dishes, spice boxes, spitoons, etc. It is of a black colour which never fades. To relieve the sable hue it is always inlaid with silver. The alloy from which *bidri* is manufactured consists of twenty four parts of tin to one of copper.

The composition of alloy, however, differs in different places where *bidri* is manufactured. In Lucknow zinc is the chief metal, lead, tin, and copper being used

in proportion of one sixteenth of zinc. In Hyderabad zinc is reduced and lead much increased. In Murshidabad lead is omitted. The vessel is moulded and reduced to the desired shape on the turning lathe. It is then engraved or chased. Finally the piece is smoothed, polished, and then coloured by the paste of sal ammoniac and saltpetre moistened in linseed oil.

It is said that one of the Hindu kings of Bidar invented the manufacture of *bidri* ware which was used as ritual utensils. The *bidri* manufacture, however, received a great impetus from the Muhammadan rulers who introduced certain motifs from other parts of India as well as from Western Asia.

Centres of Production. The chief centres of production are Hyderabad, Lucknow, Murshidabad, Purnea, and, to a small extent, Kashmir.

"In Hyderabad the industry is still an important one as it commands an extensive sale owing to the practice prevalent in the State of presenting a set of bidri-ware to the bridegroom in time of marriage. No dowry is considered complete among the better class of Muhammadans unless a complete set of bidri-ware, from bed-legs to a spitoon, is included. The prices often render it necessary for the father of a family to begin his collection years before his daughter is marriageable".

Chief forms. Bidris have two forms, *Teh Nashan* or deeply cut work, and *Zar Nashan*, raised work. In the former the pattern is deeply excavated and the silver or gold cut to the exact size and shape of the pattern. After being embedded the surface is polished. In *Zar Nashan* the pattern is chased, and silver leaf held over and patted with the finger until the form is traced over the leaf. The leaf is then cut into the desired pieces; the margin or rim of each piece is bent over and the cavity thus formed is filled with soft lead and then fixed over the pattern. Finally the silver leaf

is punched and chased on the surface in completion of the desired pattern.

Patterns met with in Bidri ware.

One of the oldest patterns in *bidri* is the poppy plant. It was a favourite pattern with the *bidri* workers of Hyderabad. Perhaps after the poppy pattern the most prevalent design is that in which wire is alone used in the elaboration of a minute ornamentation in silver crosses and stars assorted in diagonal fashion. Cypress tree also forms a beautiful pattern in *bidri*, though it is not so common.

Bidri manufactured at Lucknow has raised patterns. Large patches of silver in the forms of fish, flowers, and leaves are encrusted all over the surface. In Purnea and Murshidabad the patterns are cut from silver leaf and embedded deeply in the surface and richly polished in the approved fashion of Bengal.

The *bidri* articles in the Museum collections are from the Sir Ratan Tata and the School of Art Collections.

Shapes in Bidri manufacture.

The chief forms in the *bidri* manufactured in Hyderabad are bell-shaped *hukka* bases, spitoons of various shapes, *surahis*,

Fig. 33. Ewer and *Hukka* Bowls.
Hyderabad (Deccan) 19th century.

ewers and trays. Of the most important examples of *bidri* ware from Hyderabad in the Museum may be mentioned a globular-shaped *hukka* bowl (No. 28.5538, Fig. 33, School of Art Collection) decorated with floral sprays and meander at the neck, belonging to the 18th century. The silver inlaying has been very neatly done. Another *hukka* bowl (No. 22.2072, Fig. 33, Sir Ratan Tata Art Collection) decorated with diagonally assorted stars in pear-shaped medallions belongs to the 19th century. A *surahi* (No. 28.5415, School of Art Collection) of 18th century, is a beautiful example of balanced decoration. The belly and neck are decorated with lozenge-shaped linked spirals and four-petalled flowers. An ewer (No. 28.5539, Fig. 33, School of Art Collection) of the same period with recurved handle and straight spout, the belly and neck diapered, is a good example of *bidri* ware of the 19th century. A circular tray, (No. 22.2181, Sir Ratan Tata Art Collection), a good example of 18th century *bidri* ware is decorated with floral sprays and a central rosette. In the collection of spitoons may be mentioned an 18th century spitoon (No. 28.5420) belong-

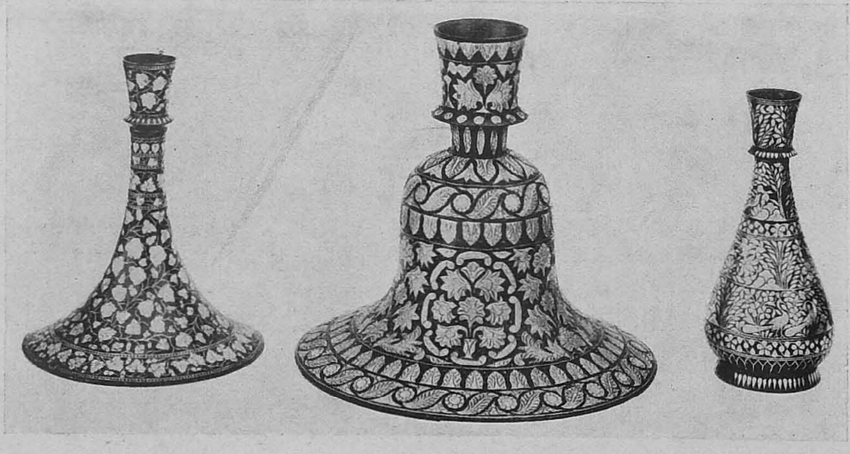

Fig. 34. *Hukka* Bowls.
Murshidabad and Luknow Work. 18-19th centuries.

ing to the School of Art Collection, which is decorated with floral sprays.

From the collection of *bidri* ware manufactured at Lucknow may be mentioned an 18th century *hukka* bowl (No. 28.5512, Fig. 34, School of Art Collection) with raised patterns consisting of floral scrolls, palmette, rosette and medallions. Another 18th century *hukka* bowl (No. 22.2137, Fig. 34, Sir Ratan Tata Art Collection) is decorated with birds disporting in dense foliage.

Purnea cannot claim a high place for its *bidri* ware. Only one example of 19th century workmanship may be mentioned (No. 22.2079, Sir Ratan Tata Art Collection). It is decorated with arabesque.

No. 22.2080 (Fig. 34) is a *hukka* bowl of the Sir Ratan Tata Art Collection which hails from Murshidabad, and belongs to the 19th century. The decoration consists of vine leaf pattern.

CHAPTER VII

COPPER AND BRASS WARES

Every province in India has two or three places famous for brass and copper wares. There are four metals employed: copper (*tamba*), zinc (*jasta*), tin and pewter (*ranga*), and lead (*sisa*). These two metals or more are utilised for the manufacture of the alloys used in India. Brass is an alloy of copper and zinc; and *phul* corresponds to bell metal. The Muhammadans prefer earthen pots to metal vessels. Brass is especially detested by them, though objection against copper is evaded by tinning it.

Shapes of domestic vessels. The household utensils are rarely ornamented, but their shapes are very graceful. The vessel almost of daily use is *lota*, i.e. a globular melon-shaped vessel flattened from the top

and having an elegant rim. The Muhammadans have given a spout to the *lota* as the Quran enjoins ablutions to be performed in running water. The shapes of *lotas* and *tonti* have given two widely different forms of decorative metal works in India.

Ceremonial implements. Some of the most beautiful wares in copper and brass in India are used in the temples. *Kosa*, a spathe-like vessel used in raising water, *achmani* or spoon for sprinkling or making drink offerings, are beautifully decorated. The bells, sacred lamps and *simhasanas* are all graceful designed.

Fig. 35. Brass Jewel Casket.
Gujarat Work. Early 17th century.

The copper and brass exhibits in the Museum collection belong to the Sir Ratan Tata, Sir D. J. Tata and the School of Art Collections. The Museum's collection of Indian brass and copper wares is very rich. Among the brass and copper articles manufactured in the Mughal period may be mentioned a brass Jewel Casket (Fig. 35)

of Gujarat manufacture. This is a fine example of early 17th century Mughal art. The tiered lid, at the top, is decorated with various Jain symbols; in the lower part hunting scenes are depicted. The box made of copper is divided in various panels by diagonal basket pattern bands, the panels chased with vigorous hunting scenes.

An ewer (No. 22.2192, Fig. 36, Sir Ratan Tata Art Collection) of early 18th century Kashmir-Ladakh work is decorated with recurved handle and spout; top, neck, and shoulder decorated with floral meanders; the belly with beautiful floral sprays in medallions; the base with palmettes, and linked ovals decorated with flowers.

A globular *hukka* bowl (No. 22.2268, Fig. 36, Sir Ratan Tata Art Collection) of the 18th century Punjab work is decorated at the neck and shoulder with floral scrolls and half-tongue designs; the belly with diagonally assorted flowers.

A Talismanic brass bowl (No. 22.2235, Sir Ratan Tata Art Collection) of the early 17th century Mughal style is chased inside with Quranic inscriptions, the ex-

Fig. 36. Copper Ewers and Brass *Hukka* Bowl.
Punjab and Kashmir Works. 18-19th centuries.

terior with magical formulas and medallions containing zodaical signs.

Centres of manufacture.

There are various centres of manufacture of copper and brass wares in the Punjab and North Western Frontier. Kashmir enjoys two forms of brass and copper works—one from Kashmir proper and the other from Ladakh. In recent times an attempt to cheapen the goods has resulted in total destruction of art feeling. In the copper and brass wares of Kashmir the low repousse prevails, which is relieved by higher repousse carried over the surface. Pierced ornaments are freely introduced.

Punjab, Kashmir, and Northwest Frontier Province.

As we have previously mentioned the above places are famous for their copper and brass wares. Of the copper ware manufactured at Peshawar may be mentioned a copper ewer (Fig. 36) of 19th century (Sir D. J. Tata Collection) workmanship with recurved spout and dragonshaped handle; neck decorated with bands of floral scrolls; the belly is flattened on two sides and engraved with rosettes. This is a typical example of the coppersmith's art in the Northwest Frontier Province. Kashmir specialises in the manufacture of tinned ware, of which the Museum has a fair number of examples. One of them is a circular tinned salver of 19th century workmanship (No. 28.5439, School of Art Collection) filled with lobed medallions and arabesque at the centre, and inscribed with Iranian couplets in cartouches at the rim.

United Provinces.

In the United Provinces, Lucknow and Benares are two marked centres for brass and copper wares. In Lucknow the work is repoussed in bold style without surface chasing, an additional effect being given by artistic perforations. The style of brass work of Benares has, however, considerably degenerated in recent years. A fair number of *chambus* or ceremonial *lotas* of Benares workmanship may be seen in the Museum in Cases Nos. 30 and 31.

The Benares *chambus* are made either of brass or copper or half brass and half copper. The belly is globular and the neck narrow. The decoration, which is always chased, consists of the figures of gods and goddesses, the sacred Ganges with fish and crocodiles, and floral scrolls.

Rajputana, etc. In Rajputana and Central India there are several centres, such as Jaipur, Bikanir, Ujjain and Indore famous for their brass and copper works. Recently brass and copper wares of Jaipur have much improved in quality. The style followed is repousse in polished brass, the patterns being arabesque, diapers or mythological scenes.

In Rajputana Jaipur produces the finest examples of brassware, and a few examples of the late 19th century and early 20th century, in the Museum, may be mentioned. A brass ewer (No. 28.5041, Fig. 37) with serpent handle and recurved spout, with the belly decorated with Ganesha and other gods and goddesses in arabesque, a double-handled goblet (No. 22.5042, Fig. 37) decorated with floral sprays, a brass goblet (No.

Fig. 37. Brass Goblets and Ewer.
Jaipur Work. 20th century.

Fig. 38. Brass Salver.
Jaipur Work. Early 20th century.

28.5035, Fig. 37) with the figure of Krishna playing the flute at the top, and the belly decorated with figures of Hindu gods and goddesses, palmettes and meanders, and a brass salver (No. 28.5110, Fig. 38) with centre decorated with the relief of Surya on chariot and other zodiacal signs, the rim decorated with the figures of Nakshatras, are some of the best representative examples of workmanship in brass.

Bombay Presidency. In Bombay Presidency brass and copper wares from the artistic point of view are manufactured at Poona, Bombay, Baroda and Nasik. In Poona the repousse is bold and massive. The Bombay School of Art brass and copper wares, of which the Mu-

seum has a representative collection, have pioneered a high development in repousse ware.

In the Bombay City artistic brass and copper wares were produced in the School of Art, from the collection of which the following may be mentioned as typical examples. A copper *kalsi* (No. 28.5048, Fig. 39), with the shoulder decorated with arabesque, the belly with lobed medallions containing figures of birds and

Fig. 39. Copper Kalsi and Vase.
Bombay School of Art Work. Early 20th century.

arabesque; copper cooking pot (No. 28.5045), the shoulder decorated with lotus meanders after Ajanta pattern the belly with medallions containing figures of musicians, women, beggars, etc.; copper vase (No. 28.5043, Fig. 39), the neck decorated with palmettes and arabesque, the shoulder with palmettes, and the belly with arched panels filled with vine patterns and birds.

Sholapur is noted for brassware production, and a brass tray (No. 28.5474, Fig. 40) of early 20th century, in the School of Art Collection, having a beaded rim, scalloped side, centre decorated with concentric circles filled with floral scrolls and peacocks in relief, is a beautiful example of brassware imbued with Indian feeling.

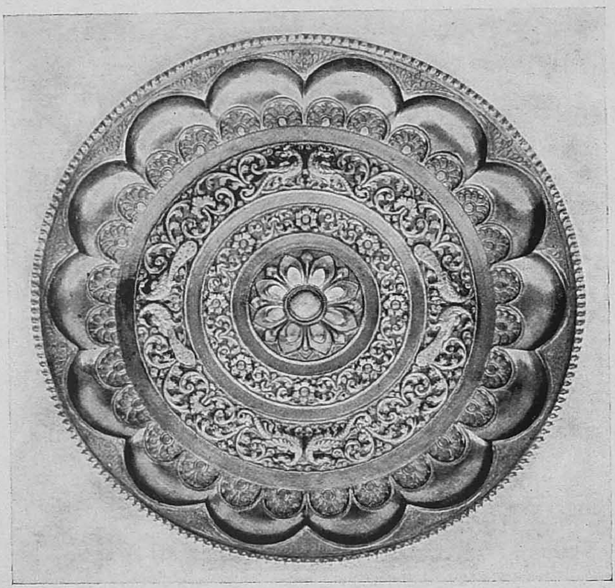

Fig. 40. Brass Tray.
Sholapur Work. Early 20th century.

Kathiawar produces very curious copper boxes for storing jewellery. These are circular in shape, stand on three massive tapering feet, and have immense clasps and padlocks. In the brass ware of Cutch, of which the Museum has a good collection, European decorative patterns are freely adopted.

In the brassware manufactured in Gujarat some very beautiful examples of lamps and *hichka* chains may be mentioned. A brass lamp (Dipa Lakshmi, No. 28.5094) of the 18th century (School of Art Collection) in the form of a woman standing and holding a lamp in her hands, a brass lamp (Dipa Lakshmi, No. 22.2739, Fig. 41, Sir Ratan Tata Art Collection) in the form of a woman standing on the back of a caparisoned elephant holding a lamp tray, and a brass chain (No. 28.5462A, Fig. 42, School of Art Collection) for swinging *hichkas* (swings), the links of which are shaped like the figures of birds, women, globular bells, elephants, etc. are note-

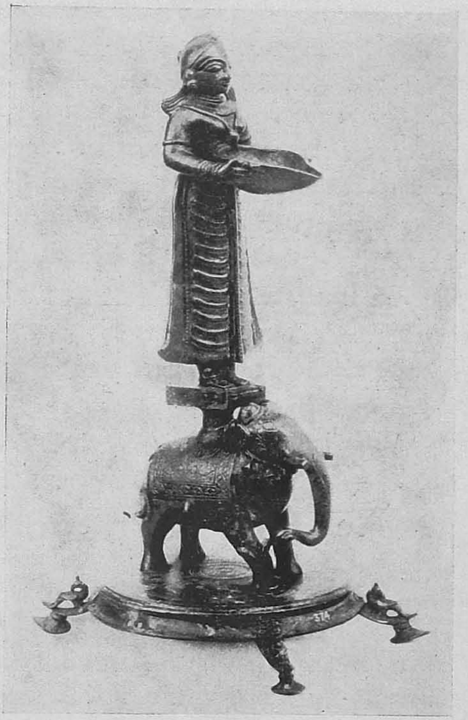

Fig. 41. Brass Lamp (Dipa Lakshmi)
Gujarat Work. 18th century.

worthy examples of the workmanship of Gujarat, and show the craftsman's work to great advantage.

Madras Presidency. In Madras Presidency, Madras Town, Madura, Mysore and Vellore are the chief centres of manufacture of brass and copper articles. Madura is famous for the manufacture of idols, toys and statuettes.

Brass and copper wares, domestic and sacred, are manufactured in many towns and villages in the Madras Presidency. Some of the examples which the Museum has belong to the 18th and 19th centuries, and are interesting specimens. These are: a brass lamp (No. 28.5087, School of Art Collection) with bell shaped, fluted and chased base, the stem decorated with scale pattern, the top shap-

Fig. 42 Brass Chain for Hichka.
Gujerat Work. Early 18th century.

ed like a fluted dish which has a scalloped rim to hold wicks, and is surmounted with the figure of a mythical bird, brass lamps (Dipa Lakshmi, Nos. 22.2740 and 22.2741, Sir Ratan Tata Art Collection) in the shape of women holding lamp trays for wicks, and a brass incense burner (No. 28.5092, School of Art Collection) octagonal in shape, perforated sides, and hanging from the chains attached for swinging or hanging.

THE ART OF METAL WORK IN NEPAL AND TIBET

Gallery X

The art of metal work in the Hill States of Nepal, Sikkim and Tibet are closely allied, and trace their origin

from Indian sources. This is due to the advance of Buddhism, which radiating through Nepal, soon spread to Sikkim, down Brahmaputra Valley, to Shigatze, Gyantze and Lhasa. The people who inhabited these countries were artistic by nature and therefore easily imbibed the Indian traditions, evolving a new style which is a combination of Indian and Chinese characteristics.

Centres of Production. In Nepal the Newars are the chief workers in metals; and the centres of copper, brass, and bell-metal industries are Patan and Bhatgaon.

In Tibet, Lhasa produces small figures in gilt copper; statuettes manufactured at Tashilumpo are also esteemed. Most of the bronze statuettes come from the Tsang and Khan provinces.

Method of manufacture. In beaten work, both in Nepal and Tibet, the metal employed, whether copper, brass, silver, or gold, is first beaten into the required thickness, placed on some form of lac, then hammered in with various home-made instruments till the required relief is obtained. If the relief is to be high the metal is reversed and the process continued on the back, and then again turned and final finish put on.

Gilding is done with an amalgam of gold and quicksilver.

In casting, a model is first made of wax. The mould is then covered with a thin coat of fine clay; this is allowed to dry, and the process applied again, after which a mixture of cowdung, clay and charcoal, with sometimes some chopped straw added, is plastered over the whole. The wax is then melted out, and when the mould is perfectly dry the molten metal is poured in.

Forms in manufacture of Brass and Copper wares. In Nepal the artistic products in brass and copper wares consist of cast images of deities, various types of *lotas, surahis,* ewers, lamps, bells, etc. In Tibet also they

include large and small figures of gilt copper, and many ritualistic instruments, such as candlesticks, thunderbolts and daggers. The portrait statuettes of holy Lamas and Buddhist saints are also common. The statuettes of the gods and goddesses of Mahayana Buddhism, such as Maitreya, Manjusri, Padmasambhava, Tara, and Ushnishavijaya, etc. were, and are still manufactured by Tibetan craftsmen.

None of these objects could be reliably placed earlier than three or four centuries.

Fig. 43. Gilt Image of Avalokiteshvara.
Nepalese Work. 18th century.

The Nepal and Tibet metal work exhibits in the Museum are from the Sir Ratan Tata, Sir Dorab Tata, and the School of Art Collections. There is a fairly good collection of Tibetan and Nepalese bronze and brass

Fig. 44. Gilt Image of Dipankara Buddha.
Nepalese Work. Circa 1758 A.D.

images, of which the following deserve closer attention from the visitors who will find in them, not only the perfection of technique, but a peculiar naivety of expression which was the keynote of Buddhist art from the day of its inception.

Among the Buddhist gods of the Mahayana School may be mentioned a beautiful gilt bronze image of Avalokiteshvara (No. 22.2894, Fig. 43, Sir Ratan Tata Art Collection) having three heads and eight arms holding rosary, arrow, book, bow, mace, etc., with his

consort seated on his left knee, which belongs to the eighteenth century, and was executed in Nepal.

The gilt bronze image of Dipankara Buddha (No. 22.2882, Fig. 44, Sir Ratan Tata Art Collection) standing on lotus pedestal supported by lions, with an elaborate arch rising from the pedestal, was executed in the year

Fig. 45. Gilt Image of Kuvera.
Tibetan Work. 18th century.

879 of the Nepalese era, which is equivalent to 1758 A.D.

A gilt bronze image of Kuvera or God of Wealth, (No. 22.2883, Fig. 45, Sir Ratan Tata Art Collection) sitting on a lion and carrying a small mongoose in his left hand, was probably executed in Tibet in the 18th century.

Fig. 46. Gilt Dancing Image of Krishna.
Nepalese Work. 18th century.

The dancing image of Krishna (No. 22.2881, Fig. 46, Sir Ratan Tata Art Collection), jewelled with garnets, torquoise, and lapis lazuli, is also a beautiful example of Nepalese art of the 18th century.

Image No. 22.2890 (Fig. 47) of the Sir Ratan Tata Art Collection represents the Tantric form of Avalokitesh-

wara, and was probably executed in Nepal in the 18th century.

Among the images of the goddesses is a bronze and gilt image of Ushnishavijaya (No. 22.2901, Fig. 48, Sir Ratan Tata Art Collection), a very popular goddess of Mongolia. She is represented with three heads and eight hands in various attitudes holding symbols. The upper right hand holds a small image of Buddha; her hair is drawn up in high chignon. The expressions of pity, anger and peacefulness are beautifully represented on her three faces respectively.

Fig. 47. Tantric form of Avalokiteshvara.
Nepalese Work. 18th century.

Fig. 48. Gilt Image of Ushnishavijaya.
Tibetan Work. 18th century.

Gilt image of Tara, rank of Bodhisattva (No. 22.2905, Fig. 49, Sir Ratan Tata Art Collection), is a fine image of the Nepalese School of the 18th century. She is seated on a lotus pedestal.

The image of White Tara, consort of Avalokiteshvara (No. 22.2903, Sir Ratan Tata Art Collection) symbolising perfect purity, is seated on a piece of turquoise matrix shaped like a rock, and was probably executed in the 18th century in Nepal.

Fig. 49. Gilt Image of Tara, rank of Bodhisattva. Nepalese Work. 18th century.

Copper and Brass Ritual Instruments, etc.

Copper and brass ritual instruments and vessels for daily use in Nepal and Tibet have various forms. Some of the exhibits are plain and without any decoration, while others are studded with coral, turquoise, etc., and decorated with fantastic patterns, such as dragons, grotesque figures, etc. In the ritual implements may be mentioned No. 22.2972 (Sir Ratan Tata Art Collection), a Tibetan circular copper Box of the 18th century, having perforated dragon medallions with gilt chased floral patterns in between. Another Tibetan circular copper box (Fig. 50, Sir D. J. Tata Collection) has the figure of goddess Mahishasurmardini on the lid. There are medallions, partly perforated, which have figures of

Fig. 50. Circular Copper Box.
Tibetan Work. 18th century.

dragons and other grotesque forms, and coral buttons. Both exhibits are displayed in Gallery X.

The teapots manufactured in Tibet have invariably dragon-shaped spouts and handles, with decoration either applied or in repousse. In Case 6 there is a Tibetan copper teapot of the 19th century (No. 28.5568, School of Art Collection). The spout, shoulder and lid are decorated in applique silver work. Another brass tea pot of the Sir D. J. Tata Collection (Fig. 51) in Case 6, has a dragon-shaped spout, and is decorated on the shoulder and belly with applique medallions in silver and copper having dragons and floral scrolls. The mouth at the top has a wide lip around. A cylindrical copper teapot (Fig. 52, Case 10) is of Tibetan manufacture, and belongs to the 18th century. The handle and spout are dragon shaped; the lid has a five-leaved crown; the body is chased and has applique medallions with the figures of gods and goddesses (Sir D. J. Tata Collection). An interesting Tibetan temple-shaped brass teapot has a dragon-shaped handle and spout. The sides have grotesque forms in the attitude of worship. It is of the 19th century workmanship.

Fig. 51. Brass Teapot.
Tibetan Work. 19th century.

Bell Metal Products.

Nepal produces vases of bell-metal which are very gracefully designed. No. 22.2226 in Case 13 (Sir Ratan Tata Art Collection) is a beautiful bell-metal vase of the 18th century Nepalese workmanship. The neck, shoulder, and belly are decorated with lotus petal patterns.

Incense Burners & Lamps.

Of the incense burners and lamps manufactured in Nepal, the following may be mentioned:

No. 22.2316 (Sir Ratan Tata Art Collection), a suspension temple-shaped sacred brass lamp of Nepalese manufacture, dating back to the 19th century. The temple is tiered, and on the lowest tier there are figures of Ganesh with lamp trays in front. One of the tiers is surmounted by birds and lions. The Nepalese incense-burner (No. 28.6180, Case 11, School of Art Collection) is profusely decorated with perforated patterns, and dates back to the 19th century.

Relic Caskets.

Relic Caskets were also designed in Nepal in the traditional form of a *stupa*. In Case No. 13 there is a *stupa*-shaped brass Relic Casket of the 18th century. It is tiered and carved with the

Fig. 52 Copper Teapot.
Tibetan Work. 18th century.

figures of scorpions and floral scrolls (No. 22.2312, Sir Ratan Tata Art Collection).

CHAPTER VIII

Circular Gallery

CARVINGS IN JADE AND OTHER HARD STONES

India has been famous from a very long time for carving in hardstones. Agate cups supplied to the Roman Empire were highly prized by the Romans. Nero is said to have spent a fortune for such a cup.

Mughal Period Jade. Jade seems to have been imported into India during the Mughal period, and was highly prized by Emperor Jahangir. A new style of ornamenting jade was found out by the Indians who encrusted it with gold and inlaid it with jewels with beautiful effect. The chief articles of jade produced in the Mughal period were cups, trays, spice boxes, spoons, bowls, Quran stands, sword and dagger handles, etc. of which the Prince of Wales Museum has a good collection.

Crystal. The Deccan was the home of crystal, and Musulipatam, Hyderabad, and Bijapur produced crystal cups, images, etc.

Agate and Jade manufacture. From a very long time Cambay has been the centre of manufacture in agate obtained from Ratanpur. The trade has now considerably degenerated. Delhi and Jaipur are now chief centres of jade manufacture.

Jade exhibits. The Museum has a very beautiful collection of Indian hard stone exhibits comprising of sword

Fig. 53 Jade Sword Handle and Cup.
Delhi Work. 17th century.

and dagger handles of jade and crystal, and powder flasks, in the Armoury section. Of particular interest in these may be mentioned dagger handles with their pommels shaped like the heads of horse and goat (Nos. 22.3794 and 22.3850); a beautiful horn-shaped powder-flask and jewelled-jade handle of a sword (Nos. 22.3803 and 22.3795). In the jade articles of the 17th century workmanship may be mentioned a beautiful jade cup, the exterior decorated with floral sprays carved in relief (No. 15.130, Fig. 53), a spice box (No. 15.104), a sword handle with the pommel shaped like the head of a horse, (No. 15.122, Fig. 53), and a Quran stand of green jade inlaid with floral pattern in white jade (No. 28.5030).

CHAPTER IX

CALICO-PRINTING

Entrance Hall (Ground Floor)

There are so many different styles of calico-printing in India, and the patterns have migrated from place to place so quickly that it is difficult to name the actual towns where they were produced. The calico of different provinces under different headings are dealt below.

United Provinces. Lucknow *chipigars* (printers) produce bed-covers (*lehap or razais*). They are printed on muslin, and the complex patterns are green, red, and blue. The Farrukhabad prints cannot be distinguished from Lucknow except that in the latter the patterns are larger and bolder. The Farrukhabad printers are also fond of the Persian Tree of Life motif. In Jahangirabad printing is done in two shades. The ground is either yellow, flesh-coloured, pale blue, or rarely, white. The pattern on the yellow ground is in chocolate and pale green; the flesh-coloured ground has pattern in pink and black, the grey with orange and black, and the white with pale blue and black.

In Fatehpur the ground is lemon yellow. The patterns are generally Persian Tree of Life, large Persian cones and vases with sprays of flowers. These are elaborated in blue and dark Indian red with the printed outlines of the patterns showing up in dark brown or black. The borders are composed of medallions, the interspaces filled with Arabic inscriptions. A striking feature of this style of calico printing is that the details are filled with brush.

The Museum has several bed covers (Case 1) decorated after the fashion we have just described.

In the Punjab, noted for calico-printing, the following places deserve notice:

Kotkamali Here after the cotton is printed the patterns are elaborated by brush. Printed *pardas* and *devalgirs* in red, yellow and green, with black outline are stamped on a white field. Sometimes Persian cones are also used for border decoration.

Sultanpur. It has a distinctive style of its own in which the cotton is dyed at first in salmon or ivory colour and then printed in terracotta red. The field is printed with elaborate tracery in which flower, leaves and stems are intertwined. The borders are in darker colours printed with balustrade-like divisions. In Sultanpur work there is soft harmony and warm feeling which deserves admiration.

Lahore. It produces wall drapings and quilts on coarse cloth. The colours used are shades of red, faded blue and green. Persian Tree of Life, birds and animals in panels and zigzag lines as border decoration serve as patterns.

Amritsar. It produces fine printed goods in imitation of embroidered shawls.

Gurdaspur. Here a special pattern is used in which the field of the cloth is divided in small squares each having a conventional flower.

Other districts noted for their calicos are Bahawalpur, Multan, Sialkot and Firozpur. The best known calicos of Kashmir which consist of wall drapery, floor canopies, etc., are in reality printed at Sambar in Jammu and closely follow Persian patterns.

Rajputana and Central India. In Ajmir the cloth is dyed pale pink or warm cream colour, and then the surface is printed with delicate floral designs boldly outlined in black and then elaborated in warmer shades of red. The fields are often filled with cones while the borders have printed floral scrolls consisting of palmyra-like expanded fans alternating in dark and light red, while the end pieces (in *saris* and *rumals*) are panelled by pillars in cusped arches.

In Sanganer, a town in Jaipur State, the craft of calico printing is highly developed. The ground colour is usually white blue or yellow, and the designs are realistic consisting of graceful sprays of flowers, flames, cones, bunches of flowers or fruits resting within ovals or plates. The natural feeling and colour sense and absence of machine like regularity gives the printed goods of Sanganer a charm which is unrivalled.

Jodhpur calicos are printed on coarse cloth. The ground colours are deep dark Indian red or dark moss green or dull blue. The pattern consists of dark bands arranged lengthwise; sometimes floral patterns are also used. White is conspicuous by its absence in these fabrics.

Udaipur specialised in printing *rumals* tied round the waist, worn over the shoulder, or tied over the head like *pagri*. The fabric is pure white or pale pink, and the printed pattern consists of bunches of flowers, cone pattern, etc.

Kunari in Kotah State has a special method for printing. The patterns are painted in resist paint first; the fabric is then washed or dyed, and the white part left or subsequently coloured by block printing.

In Central India, Ratlam, Ujjain, Gwalior, Mandsor and Indore are noted for calico printing.

Bombay Presidency. The centres of calico-printing in Gujarat are Ahmedabad, Bombay town, Surat, Broach, Baroda and Cutch. In Maharashtra there are good calico printers in Khandesh, Dharwar and Nasik.

We have a beautiful selection of printed Cutch *saris*. The ground is invariably a shade of Indian yellow printed with beautiful small flowers arranged vertically or diagonally, floral meanders, etc. The borders consisting of many bands are always printed red with beautiful floral sprays, meanders, etc. Sometimes the ground is also red. There is a *chadar* (No. 28.5795, Case 3, School of Art Collection) which is divided into many panels, each panel having different ground colours, decorated and printed with beautiful designs, including diapers, parrots, etc.

In Sind, resist paste is used in calico-printing. Preference is given to faded colours, and dull effect mostly in lemon, yellow green, brick-red or orange.

Madras. Calicos of Madras are famous for their brilliancy of colours and the patterns strictly in accordance with Dravidian conception. The most attractive feature of South Indian calicos is the very frequent use of bees-wax as a resist.

Among the printed and painted work of Madras may be mentioned a canopy (No. 28.6084, School of Art Collection, Case 2), painted and printed with mythological figures and inscriptions in Tamil. The figures include various incarnations of Vishnu, etc.

TIE-DYEING OR KNOT-DYEING (BANDHANI WORK)

Entrance Hall (Ground Floor)

The once famous *Bandhani* handkerchiefs may be given as the best known example of tie-dyeing. The

process is very laborious and may be summed up as follows:—

Process of tie-dyeing. The fabric is folded several times into half, until reduced to a square or rectangular piece perhaps not more than one foot by a foot and a half in length, and two or three folds in thickness. It is damped and put on a block with pins fixed in elaboration of some design. Then it is handed over to a girl with nails grown long so that she might easily catch the minute fold of the cloth. The raised pattern indicated by the block are tied. Great dexterity is required in tying so as not to leave any single fold untied. After the *bandhani* work is finished the cloth is handed over to the dyer who at first dyes it in light colour. After this it is again handed over to the *bandhani* who impresses another pattern from the block. This process is repeated thrice to obtain the desired pattern. In more elaborate pieces the process may be repeated indefinitely. By constant practise the *bandhani* may discard the block

Fig. 53. *Bandhani Sari.*
19th century.

Fig. 54. *Bandhani Sari.*
19th century.

and tie the cloth in different patterns. Circular, square, star-shaped spots, and zig-zag bands are common patterns.

Centres of manufacture. This art is practised throughout Central India, Rajputana, Gujarat, and Bombay, though rarely in other parts of India.

The Museum has a good assortment of *Bandhani* work from Gujarat and Rajputana in Cases 6 and 7 of which particular attention may be given to the *saris* with star designs and also turbans. *Saris* (Nos. 28.5634, Fig. 53, and 28.5648, Fig. 54, School of Art Collection) with the figures of elephants and human figures are good examples of *Bandhani*-work as practised in Rajputana.

PATOLA SILKS

Entrance Hall (Ground Floor)

Process of manufacture. One of the most interesting and beautiful examples of tie-dyeing is *patola* silk, or wedding *sari* of Gujarat, which was exported to Burma and Java according to the testimony of certain European travellers who visited those places in the sixteenth and seventeenth centuries. It is woven with warps and wefts separately tied and dyed by knot-dyeing process. The dyer takes a bundle of the warp and dyes in light colour and draws linesat fixed distances in elaboration of certain pattern. His wife ties the silk at the marked places. The yarn is next dyed in darker colour found on the work. The process is repeated till the darkest colour is reached. The weft is also tied and dyed in such a way that on the loom when it crosses the

Fig. 55. *Patola Sari.*
19th century.

warp each of its colours may exactly come in contact with the same colour in the warp.

Designs in Patola. One of the most characteristic designs bears the name of Cambay in which a diaper is produced by a white line that forms meshes flattened laterally. Within these are produced three white flowers borne on dark green stems in a maroon field. The border strips are not uniform, the end ones being broader, the patterns running vertically, and the strips are narrow, and the patterns drawn lengthwise.

In the Patan form there is no diaper; the pattern is laid sideways, and the broader strips are carried within the field and portray a series of elephants, flowering shrubs, human figures and birds. The field colour in the Patan *sari* is dark blue or green with the patterns in red, white, and yellow. In Surat the background of the border is green, while that of the field is dark red.

Examples of the nineteenth century *Patola*-work are represented by two *saris* (Nos. 28.5708, Fig. 55, and 28.5753, School of Art Collection) with diapered centres and borders running in floral meanders and sprays displayed in Cases 4 and 5.

PAINTING AND WAXING IN CALICOS

Entrance Hall (Ground Floor)

In South India block printing might almost be said to play a subordinate part, and brush colouring with wax as a resist becomes the chief method.

The French traveller Bernier, who visited India in the seventeenth century, gives a brilliant description of the court, and while referring to the draperies of the courtyard he extols the beauty of the painted cloth of Masulipatam. Tavernier and Dr. Fryer visiting India in the same century refer to painted cloths as Calicut, evidently referring to the place where they first originated.

Process of manufacturing the painted cloth. The hand-painting dyers of South India use *kalamdar*, an instrument composed of a series of fine soft steel wires fastened brush-like at the extremity of a pencil. The heated beeswax acts as ink to this pencil. The textile is spread evenly and the painter inscribes the pattern in wax. Then it is dipped in red colour and washed in hot water to remove the wax. The process is repeated several times to get a complex pattern in various colours.

Centres of manufacture. Good Palampores generally are prepared by stenciling and painting. The chief centres of Palampore manufacturers are Eleimbedu in Chingleput district; Karnul, Kalhastri and Wallaja in North Arcot district; Anantpur and Tirupapiliyam in South Arcot district; Jammalamdugu and Cuddapah in Cuddapah district; Kistna, Masulipatam and Godaveri.

The Hindus use palampores as canopies over their gods, and the Muhammadans as their prayer carpet. In the former the decoration consists of scenes from the Ramayana and Mahabharata, and in the latter the Persian Tree of Life, and *mihrab* are dominant motifs. Masulipatam is the chief centre for the manufacture of muslin praying carpets.

Process of manufacturing palampore at Tanjore. The Prince of Wales Museum is in possession of *saris* printed by wax painting process which seems to have been nurtured by the Rajas of Tanjore, and which is now lost. The centre of such painting was Karpur, a village in Tanjore. Describing its process of manufacture Watts says, "*Saris* were woven of a good quality of cotton in which a pattern previously conceived was worked out by threads of gold let into the weft as in the manufacture of *Jamdani* muslins, but with this difference that the gold was made to form the background of the pattern, not the pattern itself. The next stage seems to have consisted in colouring the pattern. This was done by their elaborating a design in

Fig. 56. *Sari.*
Tanjore Work. 17th century.

wax by means of the Kalamdar or by the Kalamdar and block-printing combined. When waxed to the desired extent the fabric was dyed in rich clay red and subsequently certain portions were printed in darker shades of the same colour in order to give shadow effects. Where the waxing had been given white or pink spaces were left on a rich soft red, and these light coloured portions were still further ornamented by block printing. The gold wire was also toned down by the process of dyeing to which it was subjected, the result being a soft rich effect unequalled for artistic feeling by any of the printed or woven fabrics of the present day".

Some very beautiful examples of painting and waxing process specially practised in Tanjore may be seen in Case 9. The artistic merit of this style of decoration is very beautiful indeed; and all the examples belong to the late 17th and early 18th centuries. There are turban pieces with the border ends decorated with floral sprays, also *saris* with geometrical patterns (Fig. 56) with very effective display of gold in between the designs. As tradition goes these *saris* and turbans were used by the Rajas of Satara.

TINSEL PRINTING

Entrance Hall (Ground Floor)

In tinsel printing an adhesive substance is printed over the cloth and subsequently dusted over with colouring matter: Gold-leaf, silver-leaf, tinfoil, mercury, amalgam, or other colour materials are pressed against the adhesive pattern.

The chief centres of tinsel printing are Punjab, Jaipur, Ujjain, Nasik and Ahmedabad.

A few examples of tinsel printing decorated with diagonally assorted *small butis*, perhaps of Jaipur workmanship, may be seen in Case No. 8.

CHAPTER X

MUSLINS PLAIN AND FIGURED

Entrance Hall (Ground Floor)

The antiquity of Indian muslin is established by its discovery in the excavations of Mohenjodaro. Yudhisthira received as present muslin from Carnatic and Mysore. In sculpture the drapery of female images reveal the thin texture of muslin. Magasthenes mentions the flowered muslins of India. In later times trade in muslin has been mentioned by numerous European travellers.

Poetic names of Dacca Muslin. The muslin of Dacca had such beauty and delicacy that it received poetic names as *malmal khas* 'the King's muslin', *abrawan* 'running water', *baft hawa* 'woven air', *shabnam* 'dew'. The Dacca muslin was valued for its lightness and extreme fineness of the threads.

Several *jamas* of fine Dacca muslin may be seen in Case 10. An examination of the texture of these muslins show to what degree of efficiency the muslin weavers had reached. All these *jamas* belong to the 18th century. Some of these *jamas* are of historical importance as they belong to members of the ruling house of Satara.

FIGURED MUSLINS

The patterns are Persian in origin. The fabric is usually grey cotton ornamented with blue black designs or occasionally with brightly coloured cotton and gold and silver wire. In *saris* the field is filled with a small decorative flower resembling jasmine. They are either scattered or arranged diagonally. Chrysanthemum flower (*gul dawdi buti*) and marigold flower (*genda buti*) also serve as patterns. When circular the pattern is *chanda*; and *turanj* means the cone-shaped pattern of Kashmir shawls. *Fardi buti* denotes minute dots; *pan buti* is heart-shaped, and *tara buti* star-shaped. Jamewar *buti* denotes flowers of a large size arranged in rows. *Jhardar* denotes sprays of flowers.

Good examples of figured muslins or *jamdani*, about which we have already spoken, may be seen in Case No. 10. The leaf-like designs running in vertically assorted bands are woven in silk threads.

SILKS PLAIN STRIPED CHECKED AND FLOWERED

Entrance Hall (Ground Floor)

Introduction of Silk Industry. It is a matter of contention among the scholars whether silk was produced to any considerable extent in the country, or

whether it was imported from China. That China was one of the sources of silk in India is certain, and it is also certain that *tasar* silk of Northern India, *teri* and *munga* silk of Assam, may have been known and manufactured long anterior to the introduction of mulberry feeding insects. It seems probable that the East India Company established silk cultivation on industrial basis.

We are not here concerned with the wild silk but the silk obtained from insects feeding on mulberry which serves as an important industrial factor in the United Provinces.

Forms of Silk. The simplest form of silk is called *doriya*, or a longitudinal stripe in the warp; when across the width it is called *salaidar*; when both in warp and weft the pattern becomes a check (*charkhana*). Various forms as *aridonya* or diagonal stripes, wavy line, lozenges, etc. are also produced.

The uses of *doriyas* and *charkhanas* were many. They were formerly used as materials for *paijamas*, loin-cloths (lungis) as well as lining for cloaks. The women folk preferred their bodices made from these materials. The demand for such materials has considerably diminished in recent times, their use now being confined as materials for shirts and lungis.

In earlier period silks were dyed bright; the paler colours were dispersed in such a way as to modify the glaring discordant note of the background colour. The following are the textiles in which silk is mainly or exclusively used:—brocades or *kimkhabs, pot than* or *bafta*, which is more lightly woven than *kimkhab*, and *amru* silks in which warp or weft is cotton.

Sangi cloth is a speciality of Azamgarh and simulates the design of *mashru* in which warp is tie-dyed. In Azamgarh district satinette is also produced.

United Provinces and Punjab. Chief centres of silk production in the United Provinces are Benares, Mirzapur, Azamgarh, Jalaun, Agra, Meerut, Allahabad, Badaun,

etc. The chief centres of the silk industry in the Punjab are Amritsar, Lahore, Patiala, Batala, Multan, Bahawalpur, Delhi, Jallandar, Peshawar and Kohat. The chief goods are *doriya* or striped silk, damasks, border stripes and *lungi*, etc. Kashmir recently has also begun producing silk.

Bengal. Bengal has been the home of silk industry at least from the 17th century when Tavernier visited Kasimbazar. In the days of the East India Company this industry was greatly developed.

In the district of Murshidabad Baluchar, Mirzapur, Khagrad and Islampur, striped and plain silk are produced. Baluchar produces a kind of silk brocade which are flowered. The ground colour of the characteristic Murshidabad *butidar* is deep purple.

Central Provinces. In the Central Provinces *tasar* is woven at Bilaspur, Raipur, Chanda and Sambhalpur, but it does not come within the category of art manufacture.

Bombay and Sind. The important centres of silk manufacture in Bombay Presidency are Bombay, Ahmedabad, Surat, Poona, Belgaum, Kolaba, Yeola, and Thana. Baroda, Jamnagar and Cutch silk manufacture is of very ordinary kind. This is extraordinary in view of the fact that silk weavers of Bengal and Madras claim to have come from Gujarat. In Sind, Karachi and Hyderabad are the centres of silk manufacture. Needle-work embroidery on silk and with silk thread is an important industry with the females of Sind.

South India. In South India silk manufacture is not of any importance. Berhampur produces checked *saris*, Arni (North Arcot) also *saris* and Trichinopoly satinettes. Tanjore, however, produced beautiful brocaded silks in the nineteenth century. Madura and Dindigul have also flourishing silk industries. Hyderabad (Deccan) has been long noted for its beautiful silks

especially the brocades or flowered textiles of Raichur and Aurangabad.

The Museum has some interesting specimens of silk textile described in connection with the *kimkhabs.*

CHAPTER XI

BROCADES, KIMKHABS AND CLOTHS OF GOLD

Entrance Hall (Ground Floor)

Ancient Brocades. There are two kinds of Indian brocades; those in pure silk are *amrus*; those with gold wire in addition are *kimkhabs.* The poetic name *kimkhab* literally means 'woven flower' and is famous for its artistic beauty. Besides Sanskrit, Pali and Prakrit literature which bristles with references to gold-cloth, Magasthenes, speaking of the costumes of the princes of India, remarks that their robes were made of gold. The rich stuffs imported to Babylon were perhaps brocades from Ahmedabad, Benares or Murshidabad.

The chief centres of brocaded silk industry are Murshidabad, Benares, Bahawalpur, Multan, Ahmedabad, Surat, Yeola, Poona and Aurangabad. The *kimkhabs* may be divided into four classes; (1) pure 'cloth of gold' or silver, (2) brocades in which the greater part is covered with gold and silver thread, the silk showing only here and there, (3) brocades in which closely woven silk has the patterns in gold or silver threads, (4) thin silk with designs in certain parts in gold or silver threads called *pot.*

In the United Provinces Benares is famous for *kimkhabs* all over India. The colours used are rich and the floral patterns well balanced. Great pain is taken in colour harmony of the borders especially in the older stuffs.

Kimkhabs in the Museum Collection may be divided into two parts, (1) those belonging to the eighteenth century or earlier, and (2) those belonging to the nineteenth century or later. A representative collection of the eighteenth century *kimkhabs* may be seen in Cases 14 and 15. Generally the background of these *kimkhabs*, which are probably of Benares manufacture, is deep magenta red with Persian cone or *Asharfi buta* (guinea pattern).

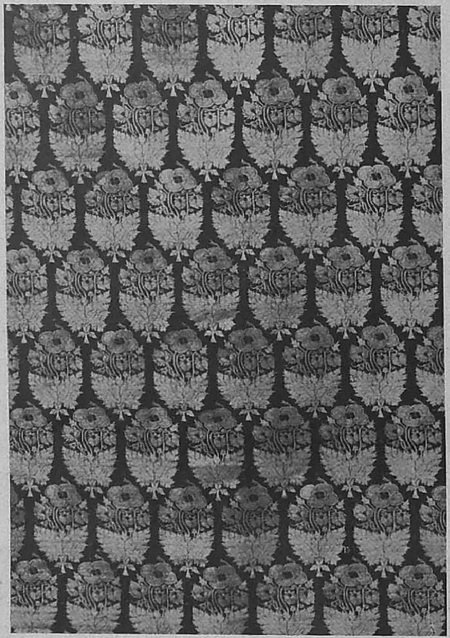

Fig. 57. *Kimkhab* Cloth.
Benares Work. 19th century.

There is a great difference between the old pieces and the new *kimkhabs*, where generally the patterns are much bigger, and the colours not so deep. *Kimkhab* (No. 28.6098, Fig. 57) with poppy pattern design, Kashmir Shawl pattern, and other floral designs may be seen in Cases 14 and 15.

In Bombay, Ahmedabad and Surat are two centres of *kimkhab* weaving. They have pale rich tones and the patterns are usually simpler than Benares and are generally more open in their composition than the closely designed decorations of Benares.

No. 28.5713 is a fine example of the nineteenth century Surat *kimkhab*, having diagonally assorted fine flowers. From Aurangabad *kimkhabs* may be mentioned a *sari* (No. 28.5710, Fig. 58) with magenta background, decorated with checked patterns; and the border has two bands filled with linked ovals and four petalled flowers, with the middle panel having floral sprays.

Hyderabad Kimkhab

In Hyderabad State Raichur and Aurangabad besides their silk brocades are famous for *kimkhab* manufacture. These are often woven on dark orange red silk, and are checkered or striped with gold lines, the meshes or interspaces filled up with various designs in gold, the most prevalent being the almost classic Chalukyan goose carrying an 'olive branch' in its beak. The borders are sewn to the body cloth of the *sari* and are of firm silk brocade. The weavers revel in bright and

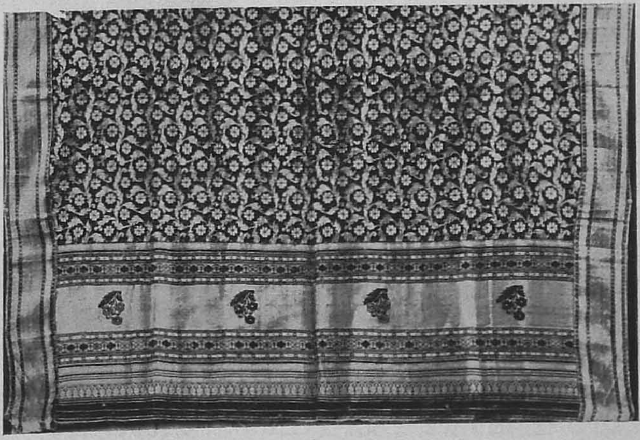

Fig. 58. *Kimkhab Sari* piece.
Surat Work. 19th century

showy colours, namely, moss green, canary, yellow, pale metallic blue and bright pink. These are worked into flowing scrolls on field of gold, and are framed by band composed of peacocks.

In Central India Burhanpur *kimkhab* resembles Aurangabad. In Madras, Trichinopoly and Tanjore produce *kimkhab*. The industry has deteriorated due to the change of taste for European patterns.

THE HIMRUS OR COTTON AND SILK BROCADE

Entrance Hall (Ground Floor)

Himru literally means a textile for use in cold season. It is woven of cotton but sometimes brocaded in silk, which is done in such a way that loose mass of silk adheres at the back to afford an extra layer.

Aurangabad is the chief centre in *Himru* trade, though recently its manufacture has declined. *Himru* of pure silk is manufactured at Aurangabad, Surat, Ahmedabad, Benares, etc. The most prevalent design in *himrus* is that in which the field is usually slate colour, and the patterns are open floral scroll with miniature cone mixed with flowers and foliage.

Some beautiful examples of *Himru*-work of Aurangabad may be seen in Nos. 28.5716, 28.5764 and 28.6117, Cases No. 12 and 13. These have beautiful decorations in narrow lengthwise bands having floral scrolls, trefoil, hexagonal patterns in red, yellow, green, blue, etc.

CHAPTER XII

EMBROIDERY

Entrance Hall (Ground Floor)

Prior to the advent of the Muslim power also the needle was in much demand, though it received an im-

petus from the Muhammadan power. But the art seems to be indigenous as different kinds of embroideries have definite associations with distinct races and tribes. As the loom always tries to stimulate embroidery the influence of embroidery must be great on weaving.

Darn stitch was employed on coarse cloth in order to correct the infirmity of the garment, and the chain stitch on fine silk or cotton to enhance their sumptuousness.

DARN, SATIN, STEM, AND FEATHER STITCHES IN INDIAN EMBROIDERIES

Definition of stitches. In modern darn stitch the needle runs along nipping up small portions of the textile at intervals. In the satin stitch the needle moves backwards and forwards from the sides or middle of a certain part to be ornamented. With stem stitch outlining is done. In feather stitch the lines of sewing are worked diagonally in a graduated V shape, each fitting within the other.

TENT, CROSS, KNOTTED, HERRING-BONE, AND BUTTON-HOLE STITCHES

By tent stitch is meant a series of parallel lines of thread of the same length carried across any particular part of a fabric, more especially to strengthen the union of two pieces, or to form the dividing line in a pattern. When these are crossed at right angles by a second series of similar lines it becomes cross stitch. Knotted stitch is produced by the thread woven round the needle and returned through the centre of the knot. Herring-bone stitch is an open and extended form of cross stitch. Lastly, button-hole stitch is a sort of half chain with loops passing round the edge of the fabric.

In Hissar and Sirsa cross stitch is employed in *chadars.* Two breadths of woolen cloths are joined with common openwork, and covered with floral and other

designs in straight lines. From Sirsa the use of cross stitch extends through Bikanir and Jodhpur and reaches parts of Central India and Central Provinces.

Bahawalpur, Multan, Montgomery, Jhang and Dera Ghazi Khan are the centres of knotted embroidery. The thread repeats the patterns on both sides, but one knot is given alternatively, looping one over the other in a short darn stitch.

Hazara, Peshawar, Kohat, Bannu, Dera Ghazi Khan and Quetta are the centres of herring-bone stitch embroidery. The thread turns on itself and crosses to the opposite end, interlacing with the previous loop.

PUNJAB DARN STITCH

Gallery II (Top Floor)

Phulkari work of Punjab.

Phulkari, or 'flowering-work' is a form of embroidery which could be used for decorating any garment, though its use has been more or less confined to *chadars* or head veils. In the true *phulkari* the pattern is diapered at intervals over the cloth, *bagh*, in which the whole surface is ornamented, and the *chob* in which edges are only ornamented. The stitch employed is darn stitch done entirely from the back.

It seems to be an indigenous art of the Jat tribes, and is practised by the peasants of Rohtak, Hissar, Gurgaon, Delhi, and Karnal. In the older examples, according to Mrs. Flora Anne Steel, green and white threads, when present were usually of cotton. This seems to have been due to the paucity of silk in those days.

In the *Shisaar phulkaris* a striking effect is produced by inserting pieces of glass held by button-hole stitched all around. This kind of *phulkari* is widespread in Northern India, and is met with from Peshawar to Lahore, Amritsar, Hissar, Sind and Kathiawar. In the last mentioned place it occurs on the bodices worn by the ladies on the *natis* or headdresses of the children.

Of Punjab *phulkari*-work the Museum has several good examples, one of which (Fig. 59, Case 12) is worthy of attention. This embroidered cloth-piece has a diapered design on a deep red ground. The joints of each strip have white rosettes with a diamond-shaped brown centre. There are also blue squares with diamond-shaped designs at the joints.

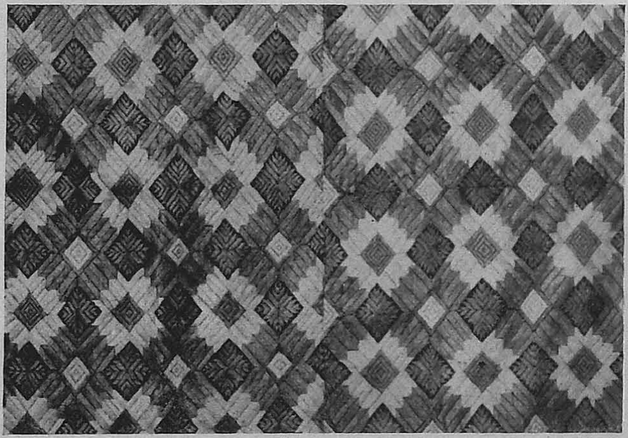

Fig. 59. Embroidered *Chadar*.
Punjab Work. 19th century.

In other examples of *phulkari*-work the design is generally a diaper filled with fir-cones, and the border decorated sometimes with herring-bone and darn stitch designs.

KASHMIR SHAWLS

Gallery II (Top Floor)

Most of the Kashmir shawls are composed of a kind of patch-work sewn together. But, unless upon very close inspection, it would be difficult for the student of Kashmir textiles, without possessing some knowledge of the process, to realise this.

The origin of Kashmir shawls cannot be traced, but the handicraft, which has given us Oriental shawls, is

very ancient. In addition to their beauty they are of material use in the (at times) chilly country of Kashmir. In texture these shawls are strong and lasting, and the warp and the woof are of wool dyed in different colours according to the design.

Kinds of Shawls. There are two main kinds of Kashmir shawls,—woven and embroidered. The embroidered ones, which are of one piece only, are very costly. The woven ones are known as *Jamewar* shawls. There is also another kind, woven and embroidered, both in one piece.

Designs of Shawls. The designs of the Kashmir shawls include representations of very many objects, animate and inanimate. Each design carries with it a signification either mythical or religious. The pear, flower, flower-bud, bird, crescent, cross, elephant, fish, fish-bone, lamp, lattice, palm-leaf, meander, wave-crest, medallion, rose, rosette, serpent, serpent and star, are the principal motifs displayed on the shawls in this Museum. Under the designation "pear-design" many other objects are included—all worked into the pear, such as the cone, the palm-leaf, the river loop, the crown-jewel, the seal, the almond and the feather. There is a difference of opinion among various writers as to the exact signification of these emblems. A fir-cone (which symbolised immortality to the ancients) is very often worked in the shape of a pear; so also the palm-leaf, which was a sign of victory among the Greeks. The view of the river Indus as seen from the Mosque at Kashmir presents a loop-like appearance, and this is embodied among the designs on the shawl and is similar in appearance to a pear. The crown-jewels in the old Iranian crown bore a design looking like a pear, and documents were sealed with a design which also bore resemblance to a pear. Hence followed the general fashion among the weavers of shawls of representing what was most predominant in their mind, i.e. the idea of a pear's shape.

The Fish-design is generally known as the "Herati" design. It consists of a rosette enclosed between two lancet-shaped leaves in a shape resembling a fish. The palm tree or palm-leaf, signifying blessing or benediction, is more literally a design to show the beautiful growth of the palm, or a representation of a human hand with all the digits extended. The cypress in the East symbolises the delicate stature of the beloved, and is connected in the Orient with beauty, love and pleasure.

Manufacture of Shawls. The Kashmir shawl is mainly worked by men, women taking no active part in its manufacture. The dyeing is a work mechanically carried on by children. The time spent on some shawls is considerable, and the stitches brought into play count over two or three millions. The cost of a really good Kashmir shawl ranges between five thousand to ten thousand rupees.

The Museum has a very beautiful and representative collection of Kashmir shawls, both embroidered and woven on the loom. These are displayed in Gallery II on the Top Floor. Some of them are described below:—

No. 22.3125, Case 5: An oblong Kashmir shawl *Jamewar* of the 17th century, handwoven and needlework with different pieces sewn together, the centre of which is a square ivory-white field. On this four *kirmans* project, and the vacant spaces between are covered with palm-leaf designs and floral sprays which form an elegant pattern. The colours used are crimson, yellow, grey and olive green. It has a border of four-inch pears aslant and is terminated with a white fringe with black squares at the ends.

No. 22.3131, Fig. 60, Case 25: One of the most beautiful shawls worked on a white ivory ground with the representation of the sun in the centre. Within the conventional representation of the luminary is a lotus flower having pears introduced with the petals, sur-

Fig. 60. Kashmir Shawl.
18th century.

rounded by a purple ring, the rays being shown in a mixed design suggesting flames. The four corners of the square are picked out with large pears copiously embellished with flowers, pears, and four fountains worked in flowers and leaves set between the pears. Below these are sections of the well-known *kirman* pattern. The whole is encased by a border of three distinct patterns, the interior one consisting of the *kirman*, crescent and pear design. The middle is the lotus, serpent, and pears; and the last displays the palm-leaf and pear. It is of Kashmir needlework, handwoven, and manufactured about the 18th century.

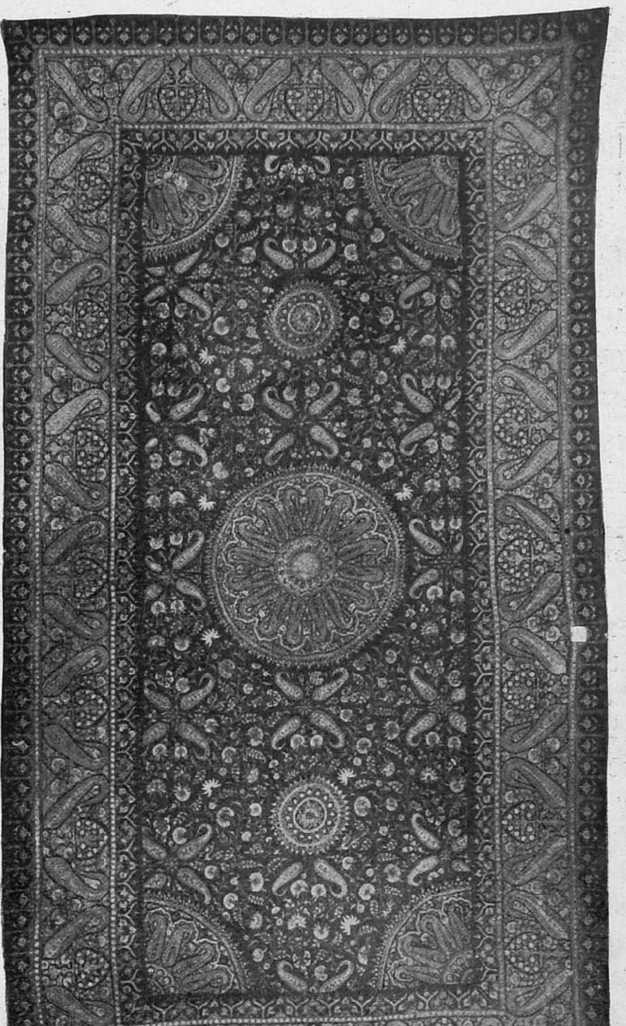

Fig. 61. Kashmir Shawl.
18th century.

No. 22.3139, Fig. 61, Case XIV: A Kashmir shawl of the 18th century having a dark blue ground with a large figure of the sun in the middle worked in pears

and flowers enclosed by *kirmans*. On either end are two smaller suns, and the whole space is interspersed with pears and floral sprays. The four corners are embellished with a section of the central design. The shawl has a border of pears placed aslant, with a wealth of flowers of different kinds. A narrow mosque-window design with flowers finishes the shawl. The colours utilised are crimson, blue, grey, yellow and brown. This shawl is also called a *farash* or bed-cover.

The above shawls belong to the Sir Ratan Tata Art Collection.

KATHIAWAR CHOKLAS

Entrance Hall (Ground Floor)

Choklas and Torans. In Kathiawar two forms of embroidery are met with,—much elongated satin stitches, and the chain stitch. The peasants practise the former, and the latter supplies the wants of rich men. The two embroidered handkerchiefs, in which the wedding dress of a bride are tied, are called *chokla*. After marriage they are fixed in the bedroom as ornament. These *choklas* are heavily embroidered of purple floss silk. They are ornamented with borders of patchwork of cotton. *Nati*, or a sort of cap for children is also heavily embroidered and decorated with the pieces of glass. The *torans* are strips of cloth with tags suspended at the bottom. They are intended to decorate the doors of the inner rooms.

The collection of Kathiawar *choklas* and *torans* in the Museum is of great and varied interest. The colours are usually bright purple and red, and the design of the centre-piece is invariably a diaper decorated with flowers in button-hole stitches with glass pieces inserted in them; or sometimes the centre is divided into squares filled with flowers of various patterns; or sometimes checkboard pattern may be seen occupying the centre. These are to be seen on the ground floor in Cases Nos. 26, 27 and 28.

Dacca embroidery. Dacca in Bengal has been famous for darn stitch and satin stitch embroideries, the mention of which is found in Abbe de Gujon in the 18th century, and Dr. James Taylor in his "Cotton Manufactures of Dacca". In Dacca embroideries the cloth is stretched on a frame and the pattern stamped on the surface, and the needle-work is done in golden *munga* silk.

CHAIN STITCH

Gallery II (Top Floor)

This form of embroidery lends itself to floral and other ornamentations, and hence is used on silks and other expensive materials where the surface is not desired to be covered. In this method of embroidery a series of looped stitches is thrown round the needle and inserted one after the other within the immediately preceding stitch, thus giving the effect of a chain. Chain stitch embroidery is primarily meant for the decoration of the borders, though it has been successfully employed for surface decoration of cloth in Bokhara, Peshawar, Kashmir, Gujarat, Cutch, Kathiawar, Sind and Bengal. Peshawar *soznis* are famous for their beautiful designs. The colours employed are blue, green and dull Indian red. In Kashmir woollen curtains, felts, etc. are embroidered in coloured *pashm*; the patterns are Persian.

Cutch and Kathiawar. The chain stitch embroidery of Cutch and Kathiawar is very famous; and proficiency in this art is due to the fact that women wear embroidered clothes. The ground materials are neutral coloured satins, mostly shades of purple, blue, green and yellow, all richly embroidered. The lower border round the skirt is also embroidered. The patterns employed generally are sprays of flowers, peacocks, etc.

It is a difficult task to describe in a short space all beautiful examples of Cutch chain embroidery which

the Museum possesses. Most of them are displayed in some of the cases in Gallery II.

No. 22.3179 in Case 6 is a skirt of a Cutch woman richly embroidered on yellow silk, having designs of peacocks and sprays of flowers spotted alternately. A running floral border finishes the garment, which belongs to the early twentieth century.

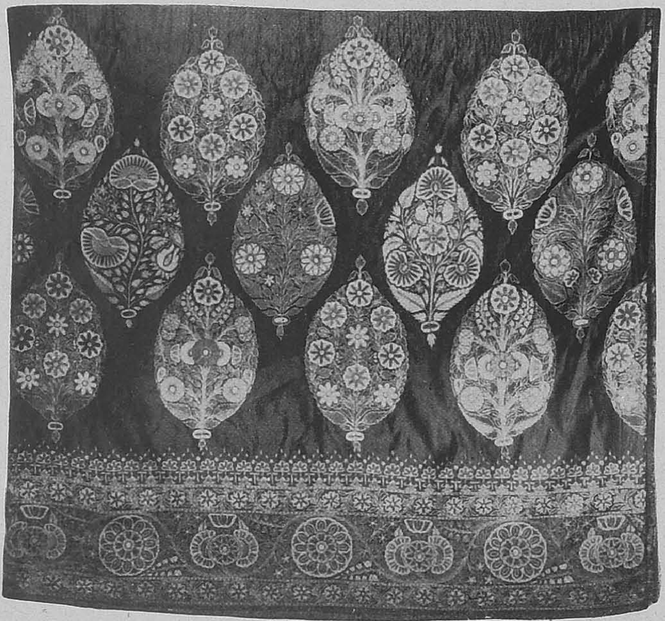

Fig. 62. Chain Stitch Embroidery.
Cutch Work. Early 20th century.

A fine specimen of embroidery work of the early twentieth century may be seen in No. 22.3183, (Fig. 62, Case 6). This is a chain stitch embroidered piece of a blue satin cloth having designs of flowers and foliage contained in leaf-shaped patterns; the border has a running design of flowers and leaves.

Another silk-embroidered curtain (No. 22.3189, Fig. 63, Case 12), is decorated with the figures of peacock alternating with decorative flowers on black silk. This

is a beautiful decorative scheme for a black background. The colours used are white, yellow, green and purple.

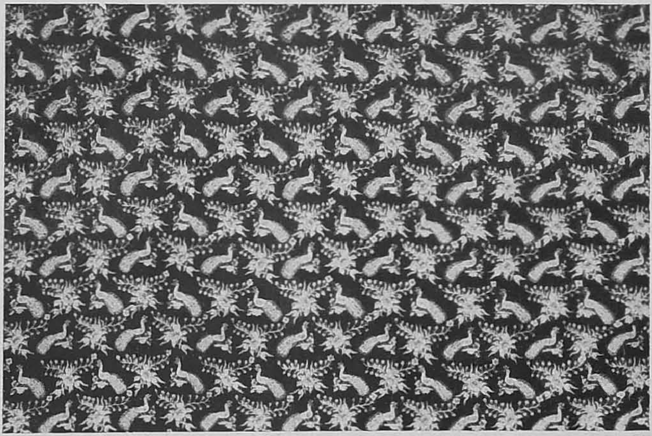

Fig. 63. Silk Embroidery.
Cutch Work. Early 20th century.

The above embroidered pieces belong to the Sir Ratan Tata Art Collection.

United Provinces. In the United Provinces, Agra and Delhi are famous for embroidery in silk thread. The style of embroidery seems to have originated in the Mughal times, when heavy textiles as velvet and satin, having a lining of coarse cloth, were embroidered in this manner.

Sind and Baluchistan. The Brahuis of Baluchistan use darn and double satin stitches, though Bugli women use herring stitch, to be mentioned in due course. The chief characteristic of Brahui embroidery is that the outline is notched; the silk used in the front panels is mostly dark red, orange, green, white, black and purple.

The Museum has a beautiful example of a Brahui double satin stitch work in a lady's petticoat (No. 28.6138) in Case 25, Entrance Hall (Ground Floor). The mate-

rial of the dress is purple silk. The cuffs, neck and front are beautifully embroidered. The designs consist of lozenges, hexagons, etc. in bands. These are sometimes filled with beautiful stars, crosses, etc. The colours used are yellow, blue, black and white. This petticoat is the most beautiful example of Brahui embroidery.

There are several examples of beautiful embroidered *soznis*, etc. from Shikarpur in Sind with elaborate designs in Case 15. The decorations consist of large stars, numerous flowers, meanders, etc. in brilliant colours.

EMBROIDERED BHUJ PETTICOAT

Entrance Hall (Ground Floor)

Kurtis are beautifully embroidered in Bhuj. The pattern is first traced and then embroidered. The design is often unrestrained, and simply revels in the luxuriance of flowers and leaves intermixed. Birds, especially parrots are also depicted. The colours are delicate, being the shades of orange, purple, red, blue, etc.

In Sind also Chain Stitch Embroidery on petticoats is in vogue, the chief centres of production being Shikarpur, Rohri, Karachi and Hyderabad.

Several examples of these petticoats may be seen in Cases 29 and 30.

CHIKAN WORK AND DRAWN STITCH

(or White Embroidery on Cotton, Silk, etc.)

Entrance Hall (Ground Floor)

This kind of embroidery is done on calico, muslin, linen or silk. Ordinarily the *chikan* embroidery may be described as ordinary satin stitch combined with a form of button holing.

Centres of manufacture. The great centres of this form of embroidery are Calcutta, Dacca, Peshawar, Madras, Bhopal and Quetta. The double satin stitch embroidery of Baluchistan has original patterns. In

Bhopal satin stitch is employed on a quilting of some coloured material which shows through the sewing.

Kind of chikan. There are three divisions in *chikan*-work: *Chikan*-work proper, white satin stitch, and *kamdani*, or gold embroidery on white cloth. *Chikan*-work seems to have originated from Eastern Bengal from where it was imported to Lucknow in the court of the Nawabs of Oudh. The chief forms of *chikan* at Lucknow are:—*laipchi*, or a sort of darn stitch, *khatwa* or applique work done on calico or linen in which small pieces of the same material are sewn on the fabric in elaboration of some design, and then finally outlined, *bakhia* or true *chikan*, in which the thread is thrown below and the needle nips up the material on the surface by minute stitch in outlining the pattern, *murri* (rice form) in which thread forms numerous knots or warts of a pyriform shape, *phanda* (millet form) in which the knots are very minute and practically spherical and *jali*, in which the strands of warps and wefts are pushed on one side by the needle and embroidered in the shape of button-holing.

KAMDANI OR GOLD AND SILVER EMBROIDERY ON WHITE CLOTH AND MUSLIN

Entrance Hall (Ground Floor)

Kamdani means light embroidery in silver or gold wire on muslin. Such embroidered fabric is generally used in the form of ladies' dress pieces.

Some beautiful examples of *kamdani*-work or embroidery with silver or gold wire decoration on muslin may be seen in Case 22. There is a beautiful coat (No. 28.5766, School of Art Collection), with sleeves, neck and the border of the coat embroidered with silver wire. Another piece (No. 28.5803) is embroidered with scale pattern design filled with flowers.

GOLD AND SILVER WIRE EMBROIDERY

Entrance Hall (Ground Floor)

The form of Gold Embroidery. This form of embroidery, because it is done on frame, is called *karchah* of which there are two forms: heavy and massive *karchah*, and light and graceful *kamdani*. The former is worked on velvet or satin, while the latter on muslin or fine silk. They are couched or cushioned, i.e. a certain portion of the design is raised above the general level. In some places specially manufactured gold wire is used to give the raised effect.

The chief centres of *karchah* work are Lahore, Delhi, Agra, Benares, Murshidabad, Ahmedabad, Ahmednagar, Burhanpur, Lucknow, Gulbarga, Aurangabad, Hyderabad, etc.

The process of manufacture. The cloth is first printed or stencilled with contemplated pattern, is stretched on the frame, and certain portions are cushioned by having sewn over them coarse woollen thread. This form of embroidery is used specially in caps, coats, canopies, elephant trappings, carpets, cushion covers, etc.

In the gold and silver embroidery works the Museum has, a fine example may be seen in a beautiful 18th century carpet (No. 15.178, Fig. 64) from Satara, which is said to have been used by Nana Fadnavis the great Maratha statesman (1762-1800). The design of the central panel is in the shape of a flower vase from which are jutting out a number of branches bearing flowers and serrated leaves. In between them peacocks are disporting. The border consists of several bands decorated with zig-zag and other floral patterns.

There are two other beautiful examples of this work done on silk. One is a tablecloth (No. 28.6106) with the central panel decorated with closely woven meanders and a central rosette. The border is also decorated with

Fig. 64. Gold and Silver Embroidered Carpet.
Hyderabad Work. 18th century.

broad bands on all four sides divided each into three parts, decorated with closely woven meanders, etc. The chains are in blue and red silk. The details are sometimes picked in silver wire, and narrow bands decorated with silver wire designs run on all sides.

In another piece (No. 28.6122) the surface is diapered and each medallion is filled with floral designs and rosettes. The details are picked out with silver wire.

CHAPTER XIII

CARPETS

Entrance Hall (Ground Floor)

The general consensus of opinion is that the art of carpet weaving was introduced in India from Persia, though it may be also true that India possessed a carpet weaving industry (though not pile carpets) anterior to Mughal conquest. The Mughals however encouraged and patronised this artistic industry, and beautiful carpets adorned their palaces, though the princes and nobles of India preferred gold *masnads*, as it imparted coolness which is desired in hot weather.

The carpet industry of India however received a fresh impetus by the London Exhibition of 1851, and Europe and America began to import Indian carpets, though it must be said that the difference in European and Indian taste coupled with the demand for cheap-goods have greatly reduced the artistic qualities of Indian goods.

In the Punjab the North West Frontier Provinces, the home of pile carpet weaving industry, besides Kashmir, Amritsar, Lahore, Multan, Hushiarpur, Bahawalpur, Kohat and Bannu, are the chief centres of carpet weaving.

The best Indian carpet in the Museum Collection is a "Hunting Carpet" (No. 28.6237, Fig. 65) which has a wide border filled with arabesque on blue ground. The central panel is decorated with a jungle scene in which may be seen tigers, antelopes, deer, elephants, etc. roaming about.

There are also a fairly large number of 19th century Indian carpets chiefly manufactured in the Punjab and Bikanir. These may be seen above the drapery cases in the Entrance Hall, Ground Floor. The designs in these consist of large flowers, diapers, meanders, etc. The

central ground colour of several of these carpets is red, and the border-colour blue.

In Rajputana Jaipur copies the patterns of Eastern and Middle Iran, in which cypress trees and many animal forms predominate. Bikanir with its preference for good wool and beautiful colours, and Ajmer for its preference to dark brown or deep maroon, with the Imperial lily portrayed in rich grey and pale yellow, are the chief centres of carpet-weaving industry.

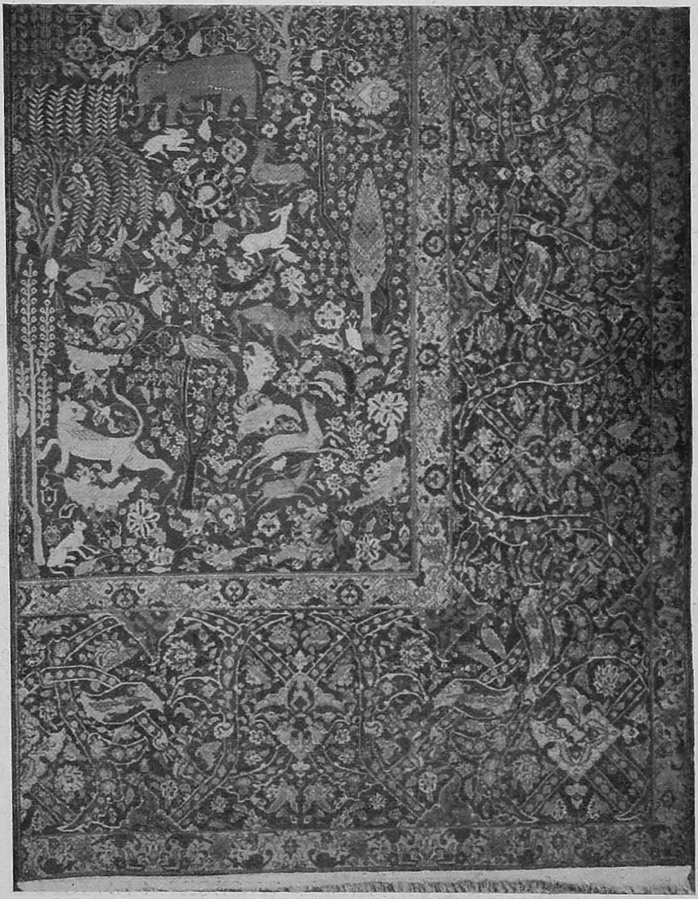

Fig. 65. Carpet.
Punjab Work. 17th century.

The Baluchistan and Sind carpets closely follow Multan in patterns. The carpets of Sind are however of cheap quality. In Baluchistan the goats' hair carpets are, however, beautiful and lustrous. The patterns are of fantastic geometrical design found on Turkoman rugs.

In the United Provinces Allahabad, Jhansi, Mirzapur also produce carpets though not of good quality.

The carpet weaving centres in Madras Presidency are Ellore, Masulipatam, Walajanagar in North Arcot, and Ayyampet in Tanjore District. The Hindu or Chalukyan pattern generally consists of medallion with addorsed bird and flowers.

In Hyderabad, Warangal was famous for its carpets; the colours were brilliant but harmonious. In the present day the colour effect is scarlet and white, and floral scrolls in the field blue-black or white with the designs in the border picked in red.

In Bombay, Ahmedabad and Poona also produce carpets. The Prince of Wales Museum has a copy of Ardebil carpet woven by the boys of Surat Orphanage in Gallery VI.

CHAPTER XIV

ARMS

Gallery VI

Indian arms in history. Earliest historical references to arms are found in the Vedas in which bows and arrows are frequently mentioned. In the age of the epics as well bow and arrow with other weapons continued to be used.

Early references to Indian weapons are found in Greek literature. Herodotus mentions that the Indians used swords inlaid with gold. Indo-Greek and Kushan

coins, with the portraits of kings, ars also important for the history of Indian weapons. From the monuments at Sanchi we know that the Indians of that period used bow and arrows, short swords, battle axes, shields, both oblong and round, and tridents, etc. In the Caves of Ajanta we find the representation of shield and short swords.

Muhammadan arms. With the conquest of Northern India by the Muslim power new arms were introduced. Complete suits of chain armour for the soldiers and even for horses, scimitars, round shields and various kinds of daggers were introduced to enrich the armoury of the Muhammedan kings.

Babar introduced the use of artillery in this country. His grandson Akbar paid greatest attention to his arsenel. Many kinds of swords, shields, daggers, battle-axes, bow and arrows, maces, armours, etc. were kept ready. Matchlocks were made in the royal *karkhana* or workshop. Such arms continued to be in use during the reigns of his successors. The Mahrattas and Rajputs also introduced some graceful forms in weapons.

Centres of manufacture. The great centres for the manufacture of arms were Lahore, Gujarat and Patiala in the Punjab; Kota and Bundi in Rajputana; Narwar and Delhi (for coats of mail and damascened arms); Gwalior in Central India, and Aurangabad and Hyderabad in Nizam's State. Arms were also manufactured at many places in Madras; and Tanjore was specially noted for its engraved steels.

The Museum has one of the best collections of arms. The swords of great historical value among them, such as the swords of Sultan Alauddin Khilji (No. 22.3708, Case 6, Fig. 66), Shah Jahan (No. 22.3866, Case 13), and Aurangzeb (No. 22.3618, Case 1), may be mentioned.

Of the daggers with handles of jade, crystal and ivory, there is a large collection (Cases 11, 12 and 13). Shields made of iron, steel, tortoiseshell and rhinoceros

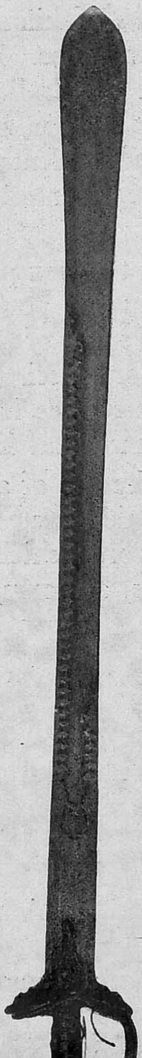

Fig. 66. Sword of Sultan Alauddin Khilji.
Delhi Work. 14th century.

hides may be seen in Cases 16, 23, 24, 25 and 26. Of particular interest is a beautiful shield of Akbar (No.

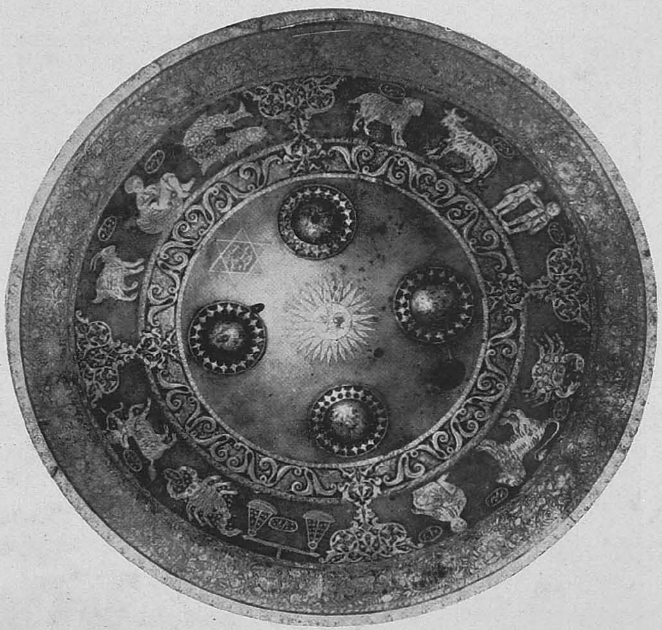

Fig. 67. Shield of Akbar.
Delhi Work. 16th century.

22.4112, Case 26, Fig. 67) damascened with intricate floral meanders and zodiacal signs.

The collection of chain armour is fairly good. An example of 18th century armour may be seen in Case No. 4. It is a complete piece of armour with headpiece, breastplates, gauntlets, etc.

In Case 9 different examples of matchlocks and carbines beautifully damascened at the sides and the locks are exhibited. Sometimes the barrels and the stocks are inlaid with ivory. These pieces belong to the 18th and 19th centuries or even earlier.

It is not possible within a short space to give a complete idea of the different varieties of arms in the Museum. Different kinds of swords and daggers with different names (Fig. 68, Cases Nos. 1, 2, 5, 6, 8, 18, 19, 20, etc.), spears (Case No. 7), knives (Cases 6, 12, etc.),

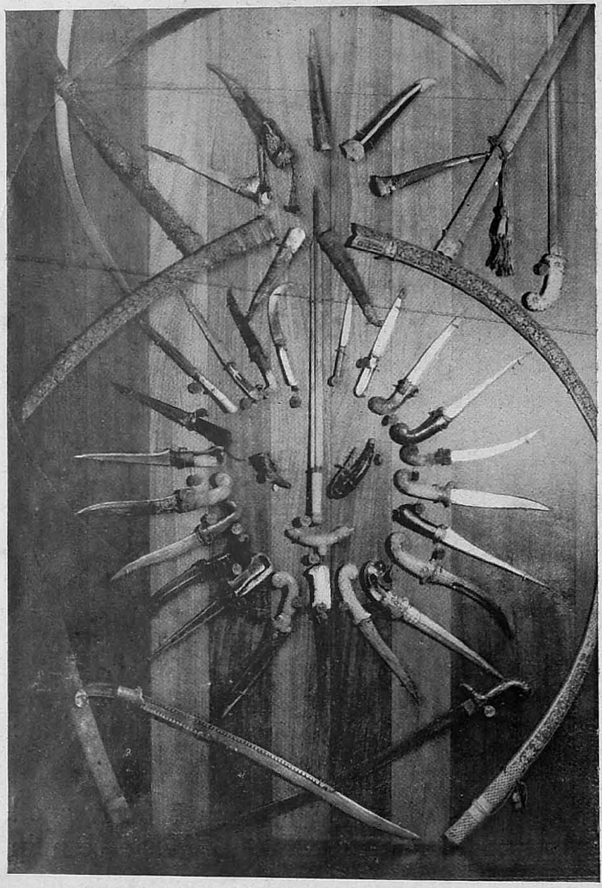

Fig. 68. Swords and Daggers
17th and 18th centuries.

flails (Case No. 23), maces (Case No. 24), battle-axes (Cases 4, 21, etc.), *khukri* (Case No. 23), etc. are innumerable examples of the beautiful and interesting works of the period, all dating back to the 16th to 19th centuries.

CHAPTER XV

INDIAN MUSICAL INSTRUMENTS

Gallery X

India is one of the few countries in the world presenting a rich variety of musical instruments. Many varieties of musical instruments have been evolved through the course of her history and are thoroughly representative of stringed, wind and percussion groups. In this short note it is impossible to recount the names of all instruments which number in the neighbourhood of five hundred or more.

Materials for manufacture.

The materials used for the manufacture of these instruments are those which are easily procurable in this country. Large boards, bamboo, cane, reeds, jackwood, blackwood, earthen-ware, and many kinds of skins are used. Silver, bronze, brass, copper and iron are also used in the manufacture of these instruments.

Characteristics of Musical Instruments.

One of the chief characteristics of musical instruments both the stringed and wind groups is that the fingers directly stop the strings and the finger-holes without having recourse to any mechanical key. Accurate timing is very necessary for the correct playing of the instruments. Drums are also very necessary in Indian music as its great beauty depends on the correctness of timing.

Modern stringed instruments.

In the North the stringed instruments underwent a change in the early days of the Muslim power. In the fourteenth century Amir Khusrau invented the *sitar*. Two piece *tabla* came into existence, and at a much later date *sarangi*, an excellent instrument for accompaniment, came into being. The ancient harp which can be seen in the sculptures of Bharhut, Sanchi and Amravati has disappeared except in some parts of the Punjab where it is known as *qanun*.

The ordinary kind of stringed instruments played with the fingers and plectrum are various kinds of *vina*, chiefly in vogue in South India and *tambura* and *sitars* of various shapes in Northern India.

It is not known when the bow for playing instruments came into being, though tradition claims that it was an invention of Ravana. *Sarangi* and violin are some of the chief forms of stringed instruments played on bow. The instruments of violin type are represented by *rabab* played now in some parts of Punjab and North West Frontier, and *saroj*, the latter still widely played in North.

In the instruments of percussion cymbals, bells, *kartal*, and drums may be mentioned.

In the wind instruments group the flute is very common. Various types of horns, *sanai*, conch-shell, etc. are used by all classes in India.

Centres of Manufacture. The chief centres of manufacture in the North are Calcutta, Murshidabad, Dacca, Bhishunpur, Lucknow, Benares, Rampur, Delhi, Gwalior, Amritsar and Lahore.

In the Madras Presidency Tanjore, Malabar, Trivandrum, etc. are famous for musical instruments.

Cases 20-25 contain the Indian musical instruments, of which the Museum has a representative collection from all over India. There are a number of *sitars* of *taus* type from Bengal in Case 25. They have invariably a peacock resonator with a finger-board attached.

The instruments manufactured at Tanjore in the Madras Presidency are beautifully decorated. A *Rudra Vina* (Case 21, Sir D. J. Tata Collection) with *yali*-shaped upper end is beautifully inlaid with ivory on both sides of the finger-board as well as the resonator. It was manufactured in the late eighteenth century.

Lucknow also has been a great centre for the manufacture of musical instruments. A beautiful example of

lacquered and painted *sitari* of Lucknow workmanship (No. 28.5147, Case 22, Fig. 69, School of Art Collection) is worthy of note. Beautiful arabesques painted in gold and red decorate the resonators and the back of the finger-board.

Saroj rabab (No. 28.5186, Case 22, Fig. 70, Lucknow-work, School of Art Collection) has an eagle-head at the end of the neck and painted figures of Krishna, Hanuman, Vishnu, Garud, Tortoise, etc. on the resonator. It was manufactured in the nineteenth century.

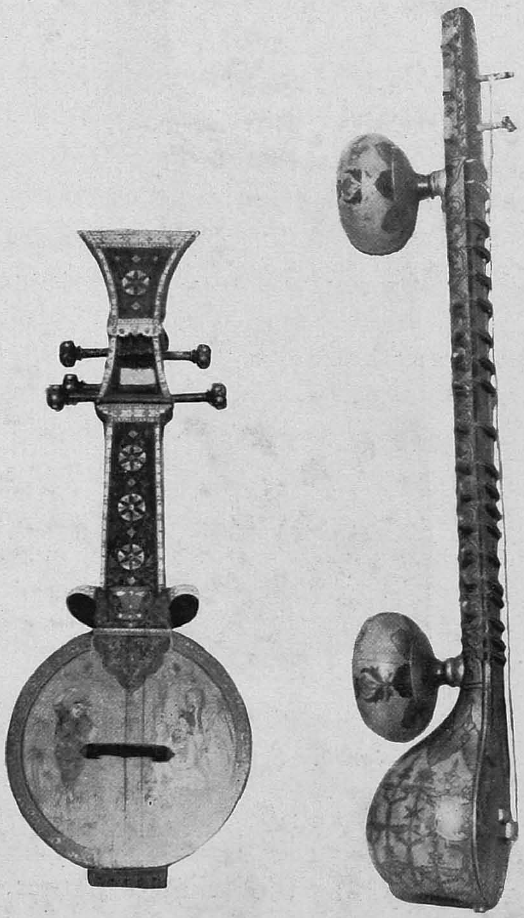

Fig. 69. *Sitari* and *Pawaj*.
Lucknow Work. 19th century.

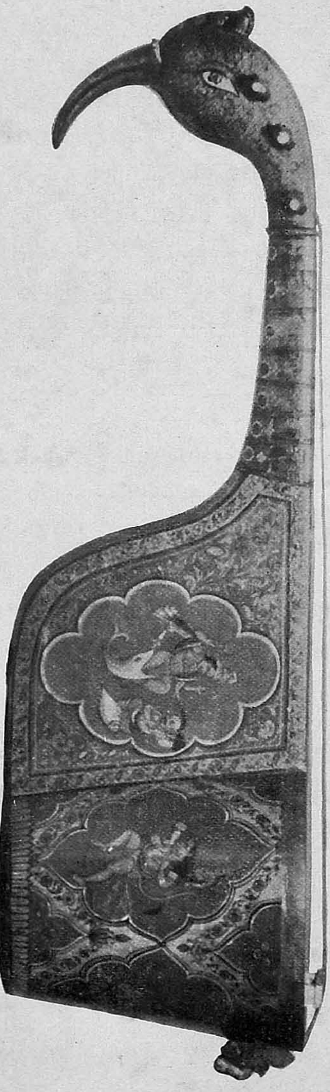

Fig. 70. *Saroj Rabab.*
Lucknow Work. 19th century.

Another instrument called *pawaj* (No. 28.5149, Fig. 69, Lucknow-work) has the painted figures of Shiva practising penance and a dancing girl on the top of the resonator, and the figures of Matsya Avatar and Krishna

on the back; the finger-board shows figures, medallions, birds, etc.

Fine musical instruments were also produced in Lahore. These were either inlaid with horn or ivory, and have painted designs.

A very fine *sitar* (No. 28.5163) from Lahore is decorated with the figures of a prince and princess, goats and floral sprays; the back of the finger-board shows designs of diagonally assorted flowers. The instrument belongs to the nineteenth century and forms part of the School of Art Collection.

Some fine *tuturis* from Gujarat are in Cases 23 and 24, besides several other musical instruments of interest.

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